18224

## STIC-Biotech/ChemLib

192007

My

From:

Seharaseyon, Jegatheesan

Sent:

Monday, June 05, 2006 10:49 AM

To: Subject: STIC-Biotech/ChemLib 10/063534

Please search SEQ ID NO: 30 in the pending and allowed databases. Also please search with a word size of 6 amino acids.

**Thanks** 

J.Seharaseyon Art Unit 1647 Remsen 4C61 Mailbox 4C70

Phone: (571)-272-0892 Fax: (571)-273-0892

Searcher Phone:
Date Searcher Picked up:
Date completed:
Searcher Prep Time:
Online Time:

Type of Search

NA# \_\_\_\_\_ AA#:\_\_\_\_\_

S/L:\_\_\_\_ Oligomer:\_\_\_\_

Encode/Transl:\_\_\_\_ Text:\_\_\_

Structure #:\_\_\_\_ Text:\_\_

Inventor:\_\_\_\_ Litigation:\_\_\_\_

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Result
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      seq length: 0
seq length: 2000000000
       Query
Match
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                                       US-10-063-534-30
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    GenCore version 5.1.9
(c) 1993 - 2006 Biocceleration
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  US-11-101-316-30
US-10-953-349-25257
US-10-953-349-21352
US-10-953-349-21351
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US-10-953-349-21350
US-11-257-581-13
US-10-953-349-15677
US-10-953-349-15677
US-10-196-749-482
US-10-196-749-482
US-10-953-349-34590
US-11-140-450-95
US-11-140-450-95
US-11-244-452-7
US-10-953-349-32813
US-10-953-349-32813
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US-11-301-554-336
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Sequence 30, Appl Sequence 25257, A Sequence 25257, A Sequence 21351, A Sequence 2938, Appl Sequence 7, Appli Sequence 12, Appli Sequence 12, Appli Sequence 12, Appli Sequence 34590, A Sequence 34590, A Sequence 3158, Appl Sequence 3158, Appl Sequence 3158, Appl Sequence 36, Appl Sequence 36, Appl Sequence 36, Appl Sequence 316, Appl Sequence 3268, Appl Sequence 3268, Appl Sequence 3268, Appl Sequence 3267, Appli Sequence 3268, Appl Sequence 3268, Appl Sequence 3268, Appl Sequence 3267, Appli Sequence 3268, Appl Sequence 3267, Appl Sequence 3267, Appl Sequence 3267, Appli Sequence 3267, Appli Sequence 3267, Appl Sequence 3267, Appli
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	imilarity 100.0%; Proc. No. 9.6e-62; Conservative 0; Mismatches 0; Indels 0; Gaps  MILLTLILLLLKGSCLEWGLVGAQKVSSATDAPIRDWAFFPPSFLCLLPHRPAWTCSQ	01316 Fro A ESSED 711/10 06867 06867 0580/2 US00/2 US09/1 US99/1	ALIGNMENTS	US-11-257-581-5 US-11-140-450-3 US-11-157-581-1 US-11-257-581-3 US-11-257-581-3 US-11-257-581-3 US-11-257-581-3 US-11-257-581-3 US-10-196-749-4 US-10-196-749-4 US-10-540-394-7 US-10-505-928-3 US-10-503-349-3 US-10-953-349-3 US-10-953-349-3 US-10-953-349-3
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; FEATURE:
, NAME/KEY: misc feature
, LOCATION: (298)..(298)
, OTHER INFORMATION: Xaa
US-10-953-349-25257
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TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT APPLICATION NUMBER: US/10/953,349
CURBER OF SEQ ID NOS: 40252
SOFTWARE: Patentin version 3.3
SQ ID NO 25258
LENGTH: 294
TYPE: PRT
ORGANISM: Triticum aestivum
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SEQ ID NO 25257
LENGTH: 314
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Publication No. US20060107345A1
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Publication No. US20060107345A1
GENERAL INFORMATION:
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Matches 9; Conser
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      Matches
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TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
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LOCATION: (130)..(130)
OTHER INFORMATION: Xaa can be any naturally occurring amino acid
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LOCATION: (150)..(150)
OTHER_INFORMATION: Xaa can be any naturally occurring amino acid
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LOCATION: (278)..(278)
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LOCATION: (276)..(276)
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larity 100.0%; Pred. Notes Notes
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Sequence 21352, Application US/10953349
Publication No. US20060107345A1
GENERAL INFORMATION:
APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA
TITLE FEBRERUCE: 2750-1579PUS2
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: PATENTIAN VERSION 3.3
SEQ ID NO 21352
LEGGTH: 515
TYPE: PRT
ORGANISM: Glycine max
US-10-953-349-21352
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APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: Patentin version 3.3
SEQ ID NO 21351
LENGTH: 516
TYPE: PRT
ORGANISM: Glycine max
US-10-953-349-21351
                                                                                                                                                                                                          RESULT 6
US-10-953-349-21350
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US-10-953-349-21351
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Sequence 21350, Application US/10953349
Publication No. US20060107345A1
GENERAL INFORMATION:
APPLICANT: ALEXANDROV, Nickolai et al.
APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
FULD REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
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Publication No. US20060107345A1
GENERAL INFORMATION:
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Matches 9; Conserv
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100.0%; Pred. No.
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NUMBER OF SEQ ID NOS: 40252

0;

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GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: Novel full length cDNA
FILE REFERENCE: H1-A0106
CURRENT APPLICATION NUMBER: US/11/293,697
CURRENT FILING DATE: 2005-12-05
PRIOR APPLICATION NUMBER: US/10/108,260
PRIOR FILING DATE: 2002-03-28
NUMBER OF SEO ID NOS: 5458
SOFTWARE: PATENTIN Ver. 2.1
SEO ID NO 3431
LENGTH: 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/11/257,581
CURRENT FILING DATE: 2005-10-24
PRIOR APPLICATION NUMBER: US/10/068,426
PRIOR FILING DATE: 2002-02-06
PRIOR RPLICATION NUMBER: 60/266,838
PRIOR FILING DATE: 2001-02-06
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 13
LENGTH: 16
TYPE: PRT
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; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (1)..(16)
; OTHER INFORMATION: Signal Peptide
US-11-257-581-13
                                                                                                                                                                                                                                              US-11-293-697-3431
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Best Local Similarity 100.
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                                                                                                                                                                                                            Sequence 3431, Application US/11293697 Publication No. US20060105376A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 9; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Sullivan, Francis
APPLICANT: McDonagh, Tom
TITLE OF INVENTION: Platlet Glycoprotein IB Alpha Fusion Polypeptides
TITLE OF INVENTION: Methods of Use Thereof
FILE REFERENCE: 22058-503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Shaw, Gray D. APPLICANT: Sako, Dianne
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ORGANISM: Glycine max
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No. US20060093614A1
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100.0%; Pred. No. 0.
Ltive 0; Mismatches
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100.0%; Pred. No.
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o. 0.21;
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RESULT 10
US-10-953-349-15677
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Best Local Similarity
Watches 8; Conserve
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; ORGANISM: Glycine max 
US-10-953-349-15677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: 506612000104

CURRENT APPLICATION NUMBER: US/10/511,937

CURRENT FILING DATE: 2004-10-19

PRIOR APPLICATION NUMBER: PCT/US2003/012946

PRIOR FILING DATE: 2003-04-24

PRIOR FILING DATE: 2003-04-24

PRIOR APPLICATION NUMBER: US 10/131,831

PRIOR APPLICATION NUMBER: US 10/325,899

PRIOR APPLICATION NUMBER: US 10/325,899

PRIOR FILING DATE: 2002-12-20
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US-10-511-937-2938
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                            Sequence 15677, Application US/10953349

Publication No. US20060107345A1

GENERAL INFORMATION:
APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-99-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: PatentIn version 3.3
SEQ ID NO 15677
LENGTH: 208
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.2
SEQ ID NO 2938
LENGTH: 206
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Rosenberg, Steven
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING
TITLE OF INVENTION: AND MONITORING TRANSPLANT REJECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Morris, MacDonald
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Pred. No.
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APPLICANT: Wood, William I.

APPLICANT: Zhang, Zemin

TITLE OF INVENTION: SCIENTED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

TITLE OF INVENTION: ACIDS ENCODING THE SAME

FILE REFERENCE: P3430R1C340

CURRENT APPLICATION NUMBER: US/10/196,749

CURRENT APPLICATION NUMBER: 10/052586

PRIOR APPLICATION NUMBER: 60/059263

PRIOR RILING DATE: 1997-09-18

PRIOR APPLICATION NUMBER: 60/059266

PRIOR FILING DATE: 1997-09-18

PRIOR APPLICATION NUMBER: 60/05250

PRIOR APPLICATION NUMBER: 60/063250

PRIOR APPLICATION NUMBER: 60/063120

PRIOR PILING DATE: 1997-10-17

PRIOR APPLICATION NUMBER: 60/063121

PRIOR FILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-24

PRIOR FILING DATE: 1997-10-24
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; TYPE: PRT
; ORGANISM: extracellular coding domain
US-10-514-462-7
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APPLICANT: Chen, Jian
APPLICANT: Chen, Jian
APPLICANT: Condard, Audrey
APPLICANT: Godowski, Paul
APPLICANT: Gurney, Austin I
APPLICANT: Pan, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 7, Application US/10514462
Publication No. US20060088909A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 11
SOFTWARE: PatentIn version 3.2
SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 482, A Publication No.
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Best Local
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TITLE OF INVENTION: Virus-Like Particles, Methods of Preparation, And Immunogenic TITLE OF INVENTION: Compositions
FILE REFERENCE: 050508-2210
CURRENT APPLICATION NUMBER: US/10/514,462
CURRENT FILING DATE: 2004-11-12
PRIOR APPLICATION NUMBER: 60/381,557
PRIOR FILING DATE: 2002-05-17
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nes 8; Conserv
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Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                          Watanabe, Colin K.
                                                                                                                                                                                                                                                                                                                                                                                                                              Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/10196749
b. US20060094864A1
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100.0%; Pred. No.
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o. 0.94;
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US-11-320-192-12
; Sequence 12, Application US/11320192
; Publication US20060104973A1
; Publication US20060104973A1
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                                                                                              GENERAL INFORMATION:
APPLICANT: He, Zhigang
APPLICANT: Wang, Kevin C.
APPLICANT: Kim, Jieun A.
TITLE OF INVENTION: Reducing NgR-p75 Mediated Inhibition of Axon
TITLE OF INVENTION: Regeneration
FILE REFERENCE: CMCC-1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 9, Application US/11320192
Publication No. US20060104973A1
GENERAL INFORMATION:
APPLICANT: He, Zhigang
APPLICANT: Wang, Kevin C.
APPLICANT: Kim, Jieun A.
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SEQ ID NO 482
LENGTH: 234
TYPE: PRT
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Best Local
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APPLICANT: Kim, Jieun A.
TITLE OF INVENTION: Reducing NgR-p75 Mediated Inhibition
TITLE OF INVENTION: Regeneration
FILE REFERENCE: CMCC-1043
CURRENT APPLICATION NUMBER: US/11/320,192
CURRENT APPLICATION NUMBER: US/10/211,157
PRIOR APPLICATION NUMBER: US/10/211,157
PRIOR APPLICATION NUMBER: US/10/211,157
PRIOR FILING DATE: 2002-08-02
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CURRENT APPLICATION NUMBER: US/11/320,192
CURRENT FILING DATE: 2005-12-27
PRIOR APPLICATION NUMBER: US/10/211,157
PRIOR FILING DATE: 2002-08-02
NUMBER OF SEQ ID NOS: 12
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PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063541
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063544
PRIOR APPLICATION NUMBER: 60/063544
PRIOR FILING DATE: 1997-10-28
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Sequence 34990, Application US/10953349

Publication No. US20060107345A1

GENERAL INFORMATION:
APPLICANT: ALEXANDROW, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: Patentln version 3.3
SEQ ID NO 34590
LENGTH: 314
TYPE: PRT
ORGANISM: Zea mays subsp. mays
US-10-953-349-34590
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US-11-320-192-12
Search completed: June 6, 2006, 21:30:07 Job time: 16 secs
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LENGTH: 243
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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1: /EMC_Celerra_SIDS3/ptodata/2/iaa/5_COMB.pep:*
2: /EMC_Celerra_SIDS3/ptodata/2/iaa/6_COMB.pep:*
3: /EMC_Celerra_SIDS3/ptodata/2/iaa/7_COMB.pep:*
4: /EMC_Celerra_SIDS3/ptodata/2/iaa/H_COMB.pep:*
5: /EMC_Celerra_SIDS3/ptodata/2/iaa/RE_COMB.pep:*
6: /EMC_Celerra_SIDS3/ptodata/2/iaa/RE_COMB.pep:*
7: /EMC_Celerra_SIDS3/ptodata/2/iaa/BE_COMB.pep:*
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LOCATION: 3-18
OTHER INFORMATION: Growth factor and
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US-10-012-231A-22
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; Patent No. 6924355
; GENERAL INFORMATION:
; APPLICANT: Baker, Ke
; APPLICANT: Botstein
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Best Local S
Matches 73
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CURRENT FILLING DATE: 2002-06-10
Prior Application removed - See File Wrappu
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 22
LENGTH: 73
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TITLE OF INVENTION: Secreted and Transmembrane
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2830P1C23
                                                                                                                                                                                                                                                                                                                  LENGTH: 73
TYPE: PRT
                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens FEATURE:
NAME/KEY: sig_peptide
LOCATION: 1-15
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                                               MLLLTLLLLLLLKGSCLEWGLVGAQKVSSATDAPIRDWAFFPPSFLCLLPHRPAMTCSQ
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Gurney, Austin L.
Hillan, Kenneth J.
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Gao, Wei-Qiang
Goddard, Audrey
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US-09-513-999C-4281
US-09-270-767-58991
US-08-938-548B-2
US-08-938-548B-2
US-08-938-548B-2
US-08-938-548B-2
US-09-711-823C-2
US-09-737-379A-2
US-09-737-379A-2
US-09-737-379A-2
US-09-737-379A-2
US-09-737-379A-2
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US-09-511-823C-2
US-09-511-823C-2
US-09-511-823C-2
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Word Searched:

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US-10-015-389A-22

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; FEATURE:
NAME/KEY: misc feature
; LOCATION: 3-18
; OTHER INFORMATION: Growth
US-10-015-389A-22
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NUMBER OF SEQ ID NOS: 477
SEQ ID NO 22
LENGTH: 73
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Best Local Similarity
Matches 73; Conserv
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P283091C48
CURRENT APPLICATION NUMBER: US/10/015,389A
CURRENT FILING DATE: 2002-06-25
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APPLICANT: Botstein, Davi
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NAME/KEY: sig_peptide
LOCATION: 1-15
OTHER INFORMATION: Signal peptide.
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ORGANISM: Homo sapiens
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             Fong, Sherman
Gao, Wei-Qiang
Goddard, Audrey
Godowski, Paul J.
Grimaldi, Christopher J.
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Gao, Wei-Qiang
Goddard, Audrey
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Gurney, Austin L.
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Grimaldi, Christopher J.
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Hillan, Kenneth J.
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Fong, Sherman
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Pred. No. 2.7e-65;
Pranatches 0;
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APPLICANT: Paoni, Nicholas F.
APPLICANT: Paoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2830P1C47
CURRENT PAPLICATION NUMBER: US/10/015,671A
CURRENT FILING DATE: 2001-12-11
Prior application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 22
INVENTION 173
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GENERAL INFORMATION:
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APPLICANT: Paoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2830P1C10
FILE REFERENCE: P2830P1C10
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                               FEATURE: sig_peptide
LOCATION: 1-15
OTHER INFORMATION: Signal peptide.
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OTHER INFORMATION: Signal
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                                                                                                             TYPE: PRT
ORGANISM: Homo sapiens
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                     FEATURE:
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NAME/KEY: misc_feature
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mes 73; Conserv
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Gao, Wei-Qiang
Goddard, Audrey
Godowski, Paul J.
Grimaldi, Christopher J.
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Hillan, Kenneth J.
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RESULT 6
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Sequence 22, Application US/10011833A
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                                                                                                                                                                                     Matches
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LENGTH: 73
TYPE: PRT
ORGANISM: Homo sapiens
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P283091C46
CURRENT APPLICATION NUMBER: US/10/015,393A
CURRENT FILING DATE: 2002-06-10
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NUMBER OF SEQ ID NOS: 477
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APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
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                                                                                                                                                                                                                                                      NAME/KEY: misc_feature LOCATION: 3-18 Crowth factor and cytokines receptors family.
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LOCATION: 1-15
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Similarity 100.0%;
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Gao, Wei-Qiang
Goddard, Audrey
Goddowski, Paul J.
Grimaldi, Christopher J
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Hillan, Kenneth J.
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Pred. No. 2.7e-65;
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Pred. No. 2.7e-65;
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                                                                                                                                                                                                                                                                                                          Sequence 22, Application US/10006041A Patent No. 6951921 GENERAL INFORMATION:
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                APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILB REFERENCE: P2830P1C8
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APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan 1.
CURRENT APPLICATION NUMBER: US/10/006,041A
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APPLICANT: Botste
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ORGANISM: Homo sapiens
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NAME/KEY: misc_feature
LOCATION: 3-18
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NAME/KEY: sig_peptide
LOCATION: 1-15
OTHER INFORMATION: Signal
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73; Conserv
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Gao, Wei-Qiang
Goddard, Audrey
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Gao, Wei-Qiang
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Godowski, Paul J.
Grimaldi, Christopher J
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                                                            Pan, James
Paoni, Nicholas F.
                                                                                                Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth J.
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Hillan, Kenneth J.
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100.0%; Pred. No. 2.7e-65;
tive 0; Mismatches 0;
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; LOCATION: 3-18
; OTHER INFORMATION: Growth factor and cytokines receptors family.
US-10-006-041A-22
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PRIOR FILING DATE: 1998-09-01
PRIOR PELICATION NUMBER: 60/098723
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098749
PRIOR FILING DATE: 1998-09-01
PRIOR PELICATION NUMBER: 60/098750
PRIOR FILING DATE: 1998-09-01
PRIOR PELICATION NUMBER: 60/098750
PRIOR FILING DATE: 1998-09-02
PRIOR APPLICATION NUMBER: 60/098803
PRIOR FILING DATE: 1998-09-02
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NUMBER OF SEQ ID NOS: 477
SEQ ID NO 22
LENGTH: 73
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CURRENT FILING DATE: 2002-07-15
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TYPE: PRT
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LOCATION: 1-15
OTHER INFORMATION: Signal
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OR APPLICATION NUMBER: 60/098843
OR FILING DATE: 1998-09-02
OR APPLICATION NUMBER: 60/099536
OR FILING DATE: 1998-09-09
OR APPLICATION NUMBER: 60/099596
OR FILING DATE: 1998-09-09
OR APPLICATION NUMBER: 60/099598
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FILING DATE: 1998-09-02
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Grimaldi, Christopher J
Gurney, Austin L.
Hillan, Kenneth J.
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APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Paoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2830P1C58
CURRENT APPLICATION NUMBER: US/10/015,392A
CURRENT FILING DATE: 2001-12-12
PRIOR APPLICATION NUMBER: 60/098716
PRIOR FILING DATE: 1998-09-01
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098749
PRIOR APPLICATION NUMBER: 60/098749
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098750
PRIOR APPLICATION NUMBER: 60/098750
PRIOR FILING DATE: 1998-09-01
PRIOR FILING DATE: 1998-09-01
PRIOR FILING DATE: 1998-09-02
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NUMBER OF SEQ ID NOS: 477
SEQ ID NO 22
LENGTH: 73
TYPE: PRT
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APPLICANT:
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                                                      PRIOR APPLICATION NUMBER: 60/098821
PRIOR FILING DATE: 1998-09-02
PRIOR APPLICATION NUMBER: 60/098843
PRIOR FILING DATE: 1998-09-02
PRIOR APPLICATION NUMBER: 60/099536
PRIOR FILING DATE: 1998-09-09
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LOCATION: 1-15
OTHER INFORMATION: Signal
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                                       APPLICATION NUMBER: 60/099596
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Gao, Wei-Qiang
Goddard, Audrey
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Hillan, Kenneth J.
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Grimaldi, Christopher
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Best Local Similarity
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SEQ ID NO 22
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CURRENT FILING DATE: 2001-12-07
CURRENT FILING DATE: 2001-12-07
PRIOR APPLICATION NUMBER: 60/098716
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098723
PRIOR FILING DATE: 1998-09-01
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PRIOR FILING DATE: 1998-09-01
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NAME KEY: sig_peptide
LOCATION: 1-15
OTHER INFORMATION: Signal peptide.
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TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                         APPLICATION NUMBER: 60/098750
FILING DATE: 1998-09-01
APPLICATION NUMBER: 60/098803
FILING DATE: 1998-09-02
APPLICATION NUMBER: 60/098821
                                                       APPLICATION NUMBER: 60/098843 FILING DATE: 1998-09-02
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                                   APPLICATION NUMBER: 60/099536
                   FILING DATE:
APPLICATION NUMBER: 60/099596
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Botstein, David
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Grimaldi, Christopher
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                   1998-09-09
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Pred. No. 2.7e-65;
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; LOCATION: 3-18
; OTHER INFORMATION: Growth factor and cytokines receptors family.
US-10-011-795B-22
                                                                        US-10-015-386A-22
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Prior Application removed -
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 22
LENGTH: 73
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Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 22
LENGTH: 73
Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 73; Conservative 0
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Best Local Similarity
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                                                                                       FEATURE:
NAME/KEY: misc_feature
LOCATION: 3-18
OTHER INFORMATION: Growth factor and cytokines
                                                                                                                                                         LOCATION: 1-15
OTHER INFORMATION: Signal peptide
                                                                                                                                                                                       FEATURE:
NAME/KEY: sig_peptide
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LOCATION: 1-15
OTHER INFORMATION: Signal peptide
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Gao, Wei-Qiang
Goddard, Audrey
Godowski, Paul J.
Grimaldi, Christopher J
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Hillan, Kenneth J.
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Score 73; DB 3;
Pred. No. 2.7e-65;
; Mismatches 0;
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Pred. No. 2.7e-65;
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RESULT 12
US-10-012-121A-22
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US-10-006-485A-22
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                                                                                                                     Sequence 22, Application US/10006485A Patent No. 7026448 GENERAL INFORMATION:
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Best Local :
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TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: sig_peptide
LOCATION: 1-15
OTHER INFORMATION: Signal peptide.
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APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan 1.
APPLICANT: Ferrara, Napoleone
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1 AQPRGEGEKVGDG 73
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Gao, Wei-Qiang
Goddard, Audrey
Goddwski, Paul J.
Grimaldi, Christopher J
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Botstein, David
Desnoyers, Luc
Eaton, Dan 1.
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Hillan, Kenneth J.
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Pred. No. 2.7e-65;
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PRIOR FILING DATE: 1998-09-01
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PRIOR APPLICATION NUMBER: 60/098750
PRIOR FILING DATE: 1998-09-02
PRIOR APPLICATION NUMBER: 60/098803
PRIOR APPLICATION NUMBER: 60/098821
PRIOR APPLICATION NUMBER: 60/098821
PRIOR APPLICATION NUMBER: 60/098843
PRIOR FILING DATE: 1998-09-02
PRIOR APPLICATION NUMBER: 60/099536
PRIOR APPLICATION NUMBER: 60/099596
PRIOR APPLICATION NUMBER: 60/099598
PRIOR APPLICATION NUMBER: 60/099598
PRIOR APPLICATION NUMBER: 60/099502
PRIOR APPLICATION NUMBER: 60/099602
PRIOR APPLICATION NUMBER: 60/099602
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PRIOR APPLICATION NUMBER: 60/098716
PRIOR FILING DATE: 1998-09-01
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and
TITLE OF INVENTION: Acids Encoding the Same
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Gao, Wei-Qiang
Goddard, Audrey
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Grimaldi, Christopher J.
Gurney, Austin L.
Hillan, Kenneth J.
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FILING DATE: 1998-09
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OR APPLICATION NUMBER: 60/101930
OR FILING DATE: 1998-09-17
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OR APPLICATION NUMBER: 60/101068
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GENERAL INFORMATION:
APPLICANT: Baker, R
APPLICANT: Botstei
APPLICANT: Desnoye
APPLICANT: Eaton,
APPLICANT: Ferrara;
APPLICANT: Fong, S
APPLICANT: Gao, We
APPLICANT: Goddard
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GENERAL INFORMATION:
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OR FILING DATE: 1998-10-21
OR APPLICATION NUMBER: 60/105169
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IN FILING DATE: 1998-10
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FILING DATE: 1998-10-27
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FILING DATE: 1998-10-14
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 Fong, Sherman
Gao, Wei-Qiang
Goddard, Audrey
                                                                         Baker, Kevin P.
Botstein, David
Desnoyers, Luc
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Eaton, Dan 1.
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PRIOR FILING DATE: 1998-09-01
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APPLICATION NUMBER: 60/103401 FILING DATE: 1998-10-07 APPLICATION NUMBER: 60/103449

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APPLICATION NUMBER: 60/106023
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           Fong, Sherman
Gao, Wei-Qiang
Goddard, Audrey
Godowski, Paul J.
Grimaldi, Christopher J.
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                                                                                                                                              Baker, Kevin P.
Botstein, David
Gurney, Austin L.
                                                                                               Ferrara, Napoleone
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Eaton, Dan 1
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; NAME/KEY: sig_peptide
; LOCATION: 1-15
; OTHER INFORMATION: Signal peptide.
FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 3-18
; OTHER INFORMATION: Growth factor and cytokines receptors family.
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CURRENT FILING DATE: 2002-06-25
Frior application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 477
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APPLICANT: Pan, James
APPLICANT: Pan
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Search completed: June 6, 2006, 21:16:07
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GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd.

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Result
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1: uniprot_sprot:*
2: uniprot_trembl:*
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Q3UNC6 MOUSE

$27A5 MOUSE

$27A5 MOUSE

Q5R588 PONBY

Q4X6W7 PLACH

Q3R079 XYLFA

Q8K4W3 MOUSE

Q7NE75 GLOVI

Q8MK16 BOVIN

Q9EMP1 AMEPU

Q6IKC7 DROME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q6UWT3_HUMAN
Q3YP30_UTAST
Q3YP29_UTAST
Q3YP32_UTAST
Q3YP31_UTAST
Q3YP37_UTAST
CYB_BRAID
CYB_BRAID
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  Obuwt3 homo sapien
O3yp39 uta stansbu
O3yp39 uta stansbu
O3yp31 uta stansbu
O3yp31 uta stansbu
O6elw3 brachylagus
O3up37 uta stansbu
O6elw3 brachylagus
O3unc6 mus musculu
O4ldg0 m bile acyl
O5r588 pongo pygma
Q4x6w7 plasmodium
O3r079 xylella fas
O8k4w3 mus musculu
O7ne75 gloeobacter
O8mki6 bos taurus
O9emp1 amsacta moo
O6ikc7 drosophila
O43612 homo sapien
O7768 sus scrofa
O5ugi5 homo sapien
O7768 sus scrofa
O5ugi5 homo sapien
O77617 giardia alb
O4aly9 phlorobium
O59sc1 candida alb
O4aly9 chlorobium
O3gk41 prosthecoch
O5gk1 prosthecoch
O5gk1 candida alb
O4aly9 homo sapien
O3gk41 prosthecoch
O5gk1 candida alb
O4aly9 homo sapien
O3gk41 prosthecoch
O5gk1 candida alb
O4aly9 homo sapien
O4s653 homo sapien
O4s653 homo sapien
O4s653 homo sapien
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RESULT 2
Q3YP30\_UTAST
ID Q3YP30\_UTAST
AC Q3YP30;

PRELIMINARY;

337 AA

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rvative LLLLKGS          LLLLKGS KVGDG 73 KVGDG 73	nipr e Cr 9020 879	rney A.L., Abaya B., Chui C., Croy er J.S., Grimaldi H.S., Klimowski I D., Mark M.R., F Sinmons L., Singh Sinmons L., Singh Yu G., Yu Yu Yu G., Yu Yu Yu G., Yu Yu Yu G., Yu Y		IINAF	2008 2008 2008 2008 2008 2008 2008 2008
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Best Local
Matches 1
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RGO; GO:0016021; C:integral to membrane; IEA.
RGO; GO:0016020; C:membrane; IEA.
RGO; GO:0005746; C:mitochondrial electron transport chain; IEA.
RGO; GO:0005739; C:mitochondrion; IEA.
RGO; GO:0005739; C:mitochondrion; IEA.
RGO; GO:0005276; F:iron ion binding; IEA.
RGO; GO:00046872; F:metal ion binding; IEA.
RGO; GO:0046872; F:metal ion binding; IEA.
RGO; GO:0016491; F:oxidoreductase activity; IEA.
RGO; GO:0016491; IEA.
RGO; GO:0016491; F:oxidoreductase activity; IEA.
RGO; GO:0016491; IEA.
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27-SEP-2005, s
07-FEB-2006, e
Cytochrome b
Name=cytb;
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27-SEP-2005, s
07-FEB-2006, c
Cytochrome b
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29 UTAST
Q3YP29 UTAST
Q3YP29;
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STRAIN=ROM 37152;
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Lepidosauria; Squamata; Iguania; Iguanidae; Phrynosomatinae; Uta.
                                               νεριαοsauria; Squamata;
NCBI_TaxID=43653;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=43653;
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                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Lepidosauria; Squamata; Iguania; Iguanidae; Phrynosomatinae; Uta.
                                                                                                                                                        Mitochondrion.
                                                                                                                                                                                              Uta stansburiana (Side-blotched lizard).
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                                                                                                                                                                                                                                                                                                                                                                                                                           338 AA.
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RESULT 4
Q3Y932_UTAST
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AC Q41_TAST
AC Q4
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Best Local
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GO; GO:005796; C:mitcchondrial electron transport chain; IEA.
GO; GO:0005796; C:mitcchondrial; IEA.
GO; GO:0005796; C:mitcchondrial; IEA.
GO; GO:0005796; F:mitcchondrial; IEA.
GO; GO:0016792; F:metal ion binding; IEA.
GO; GO:0016491; F:oxidoreducrase
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InterPro; IPR005797; Cytb_b6_N.
Pfam; PF00032; Cytochrom_B_C; 1.
Pfam; PF00033; Cytochrom_B_N; 1.
PROSITE; PSS1003; CYTB_NTER; 1.
PROSITE; PSS1003; CYTB_NTER; 1.
Electron transport; Heme; Iron; Membrane; Metal-binding;
                                                                                                                                                                                                                                             NUCLEOTIDE SEQUENCE.
STRAIN=ROM 37151;
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NON_TER 1
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                                                                                                                                                                                                                                                                                                                NCBI_TaxID=43653;
                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Lepidosauria; Squamata; Iguania; Iguanidae; Phrynosomatinae; Uta.
                                                                                                                                                                                                                                                                                                                                                                                     Mitochondrion
                                                                                                                                                                                                                                                                                                                                                                                                        Uta stansburiana (Side-blotched lizard)
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10; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry version 1.
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Pred. No.
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RESULT
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Q3YP31_UTAST
Q3YP31;
27-SEP-2005, i
27-SEP-2006, e
07-FEB-2006, e
Cytochrome b
  respiratory chain that generates an electrochemical potential coupled to ATP synthesis (By similarity).
-!- COFACTOR: Binds 2 heme groups noncovalently (By similarity).
-!- SUBUNIT: The main subunits of complex b-cl are: cytochrome b, cytochrome cl and the Rieske protein (By similarity).
-!- SIMILARITY: Belongs to the cytochrome b family.
                                                                                                                                                                                                                                         Lindell J., Murphy R.W.;

"Simple identification of divergent mtDNA haplotypes with MAMA.";

"Submitted (Apr-2005) to the EMBL/GenBank/DDBJ databases.

-I- FUNCTION: Component of the ubiquinol-cytochrome c reductase complex (Complex III or cytochrome b-cl complex), which is a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR005798; Cytb_b6_C.
InterPro; IPR005797; Cytb_b6_N.
Pfam; PF00032; Cytochrom_B_C; 1.
Pfam; PF00033; Cytochrom_B_N; 1.
PROSITE; PS51003; CYTB_CTER; 1.
PROSITE; PS51002; CYTB_NTER; 1.
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STRAIN=ROM 37122;
                                                                                                                                           Copyrighted
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NCBI_TaxID=43653;
                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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GO:0016021; C:integral to membrane; TEA.
GO:0016020; C:membrane; IEA.
GO:00057146; C:mitochondrial electron transport chain; IEA.
GO:0005739; C:mitochondrion; IEA.
GO:000566; F:iron ion binding; IEA.
GO:0046672; F:metal ion binding; IEA.
GO:0016491; F:oxidoreductase activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GO:0016021; C:integral to membrane; IEA.
GO:0016020; C:membrane; IEA.
GO:0005746; C:mitochondrial electron transport chain; IEA.
GO:0005799; C:mitochondrion; IEA.
GO:0005799; C:mor ion binding; IEA.
GO:0046872; F:metal ion binding; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GO:0016491; F:oxidoreductase activity; GO:0006118; P:electron transport; IEA.
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                                                                                               DQ001862; AAZ20707.1; -; Genomic_DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   by the UniProt Consortium, see http://www.uniprot.org/terms under the Creative Commons Attribution-NoDerivs License
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Pred. No.
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0.94;
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RESULT 6
Q3YP37 UT
ID Q3YF
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                                                                           R GO; GO:0016021; C:integral to membrane; IEA.

R GO; GO:0016020; C:membrane; IEA.

R GO; GO:0005746; C:mitochondrial electron transport chain; II

R GO; GO:0005739; C:mitochondrion; IEA.

R GO; GO:0005706; F:iron ion binding; IEA.

R GO; GO:0046872; F:metal ion binding; IEA.

R GO; GO:0046872; F:metal ion binding; IEA.

R GO; GO:0016491; F:oxidoreductase activity; IEA.

R GO; GO:0016491; F:oxidoreductase activity; IEA.

R GO; GO:0016491; F:oxidoreductase activity; IEA.

R GO; GO:0016118; P:electron transport; IEA.

R GO; GO:0006118; P:electron transport; IEA.

R GO; GO:0006118; P:electron transport; IEA.

R FINEETPO; IPR005798; Cytb b6_N.

R Pfam; PF00032; Cytochrom_B_C; 1.

R Pfam; PF00033; Cytochrom_B_C; 1.

R Pfam; PF00033; Cytochrom_B N; 1.

R PGS1TE; PS51003; CYTB_NTER; 1.

R PROSITE; PS51003; CYTB_NTER; 1.

R PROSITE; PS51003; CYTB_NTER; 1.

R PROSITE; PS51003; CYTB_NTER; 1.
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Q3YP37;
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                              EMBL; DQ001855; AAZ20701.1; -; Genomic DNA. GG; GO:0016021; C:integral to membrane; IEA. GO; GO:0016020; C:membrane; IEA. GO; GO:0016020; C:metochondrial electron transport GO; GO:0005736; C:mitochondrion; IEA. GO; GO:0005506; F:iron ion binding; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lindell J., Murphy R.W.;
"Simple identification of divergent mtDNA haplotypes with MAMA.";
Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: Component of the ubiquinol-cytochrome c reductase complex (complex III or cytochrome b-cl complex), which is a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR005798; Cytb_b6_C.
InterPro; IPR005797; Cytb_b6_N.
Pfam; PF00032; Cytochrom_B_C; 1.
Pfam; PF00033; Cytochrom_B_N; 1.
PROSITE; PS51003; CYTB_CTER; 1.
PROSITE; PS51002; CYTB_NTER; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -i- COFACTOR: Binds 2 heme groups noncovalently (By similarity) -i- SUBUNIT: The main subunits of complex b-c1 are: cytochrome cytochrome c1 and the Rieske protein (By similarity).
-i- SIMILARITY: Belongs to the cytochrome b family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUCLEOTIDE SEQUENCE.
STRAIN=ROM 37048;
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Lepidosauria; Squamata; Iquania; Iquanidae: Phrvnosomarinae. IIra
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                                                         Mitochondrion; Respiratory chain; Transmembrane; Transport.
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100.0%;
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      D82F2642375D80BA CRC64;
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15-MAR-2005, integrated 16-AUG-2004, sequence v 07-FEB-2006, entry vers Cytochrome b.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BRAID
                                                                                              METAL
METAL
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SEQUENCE
                                                                                                                                                                                                        InterPro; IPR005798; Cytb_b6_C.
InterPro; IPR005797; Cytb_b6_N.
Pfam; PF000032; Cytcochrom_B_C; 1.
Pfam; PF000033; Cytcochrom_B_N; 1.
PROSITE; PS51003; CYTB_CTER; 1.
PROSITE; PS51002; CYTB_NTER; 1.
                                                                                                                                                                                                                                                                                   EMBL; AY292721; AAS54917.1; -; Genomic_DNA.
SMR; Q6ELW3; 2-379.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUCLEOTIDE SEQUENCE [GENOMIC DNA].

PubMed=15503672; DOI=10.1080/10635150430445715;

Matthee C.A., van Vuuren B.J., Bell D., Robinson T.J.;

Matchee C.A., van Vuuren B.J., Bell D., Robinson T.J.;

"A molecular supermatrix of the rabbits and hares (Leporidae) allows
for the identification of five intercontinental exchanges during the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Name=MT-CYB; Synonyms=COB,
Brachylagus idahoensis (Py
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota;
                                                                                                                                                                                                                                                                                                                        Distributed
                                                                                                                                                                                                                                                                                                                                  Copyrighted
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                                                                                                                                                                         CHAIN
                                                                                                                                                                                                 Electron
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                                                                                                                                                                                   tochondrion;
                                                                                                                                                                                                                                                                                                                                                                                 COFACTOR: Binds 2 heme groups noncovalently (By similarity). SUBUNIT: The main subunits of complex b-cl are: cytochrome b, cytochrome cl and the Rieske protein (By similarity). MISCELLANEOUS: Heme 1 (or BL or b562) is low-potential and absorbs at about 562 nm, and heme 2 (or BH or b566) is high-potential and
                                                                                                                                                                                                                                                                                                                                                        at about 562 nm, and heme 2 (or BH or b566) is absorbs at about 566 nm (By similarity). SIMILARITY: Belongs to the cytochrome b family.
                                                                                                                                                                                                                                                                                                                                                                                                                                              FUNCTION: Component of the ubiquinol-cytochrome c reductase complex (complex III or cytochrome b-c1 complex), which is a respiratory chain that generates an electrochemical potential coupled to ATP synthesis (By similarity)
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97
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196
379
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                                                                                                                                                                                                                                                                                                   under the Creative Commons Attribution-NoDerivs License
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                                               Conservative
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                                                                                                A,
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Pred. No.
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(heme b566 axial ligand)
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RESULT OF STANDARD ST
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Q3UNC6 MOUSE
Q3UNC6;
NUCLEOTIDE SEQUENCE.
STRAIN=C57BL/6J; TISSUE=Gall bladder;
STRAIN4-C57BL/6J; DOI=10.1126/science.1112009;
PubMed=16141073; DOI=10.1126/science.1112009;
RIKEN Genome Exploration Research Group, and Genome RIKEN Genome Exploration Research Group, and Consortium
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Carninci P., Kasukawa T., Katayama S., Gough J., Fr. Oyama R., Ravasi T., Lenhard B., Wells C., Kodzius Bajic V.B., Brenner S.E., Batalov S., Forrest A.R., Davis M.J., Wilming L.G., Aidinis V., Allen J.E.,
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MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
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Adult male gall bladder cDNA, RIKEN full-length clone:G630012H08 product:solute carrier family
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Name=Slc27a5;
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                                                                                                                                                                                                       transcriptional landsca
nce 309:1559-1563(2005).
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27 (fatty acid
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us R., Shimokawa K
                                                 Science Group
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Suzuki S.,
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"Antisense Transcription in the Mammalian Transcriptome.";

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RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Hayashizaki Y.,

"Funn-rioral T.,

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RT "Funn-rior
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STRAIN=C57BL/6J; TISSUE=Gall bladder;
STRAIN=C57BL/6J; TISSUE=Gall bladder;
MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Kawai J., Shinagawa A., Fukunishi Y., Konno H., Adachi J., Fukuda Arakawa T., Hara A., Fukunishi Y., Konno H., Kondo S., Yamanaka Arakawa T., Hara A., Fukunishi K., Kiyosawa H., Kondo S., Yamanaka
  STRAIN=C57BL/6J; TISSUE=Gall bladder;
MEDLINE=20499374; PubMed=11042159; DOI=10.1101/gr.145100;
Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K.,
Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
"Normalization and subtraction of cap-trapper-selected cDNAs
prepare full-length cDNA libraries for rapid discovery of new
Genome Res. 10:1617-1630(2000).
  NUCLEOTIDE SEQUENCE.
STRAIN=C57BL/6J; TISSUE=Gall bladder;
MEDLINE=20530913; PubMed=11076861; DC
   Birney E., Hayashizaki Y.;
"Analysis of the mouse transcriptome based 60,770 full-length cDNAs.";
  NUCLEOTIDE SEQUENCE
   Nature 420:563-573 (2002).
   NUCLEOTIDE SEQUENCE
  "Functional annotation
  STRAIN=C57BL/6J; TISSUE=Gall bladder; MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;
  Science
  409:685-690(2001).
  309:1564-1566 (2005).
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PubMed=11076861; DOI=10.1101/gr.152600;
M., Aizawa K., Nagaoka S., Sasaki N., Carninci
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  full-length mouse cDNA collection.";
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ID S27A5 MOUSE

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AC Q4LDG0; 088694; Q91VD5;

AC Q4LDG0; 088694; Q91VD5;

DT 22-NOV-2005, integrated into UniPro
DT 22-NOV-2005, sequence version 1.

DT 07-MAR-2006, entry version 11.

DE Bile acyl-CoA synthetase (EC 6.2.1.

DE Bile acyl-CoA synthetase (EC 6.2.1.

DE Bile acyl-CoA synthetase (EC 6.2.1.

DE MIS Synthetase-related protein) (VLACS-

DE transport protein 5) (FATP-5) (Solu

Mame-S1c27a5; Synonyms=Acsb, Acsvl6

GN Name-S1c27a5; Synonyms=Acsb, Acsvl6

GN Mus musculus (Mouse).

GN Mus musculus (Mouse).

GN Mus musculus (Mouse).

CN Mus musculus (Mouse).

CN Mus musculus (Mouse).

RN Musculus (Mouse).

CN Mus musculus (Mouse).

RN Musculus (Mouse).

CN Mus musculus (Mouse).

RN Mammalia; Eutheria; Euarchontoglire

OC Muroidea; Muridae; Murinae; Mus.

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RN NUCLEOTIDE SEQUENCE [MRNA].

RN MEDLINE=98308102; PubMed=9642112; D

RA Berger J., Truppe C., Neumann H., F

"A novel relative of the very-long-

acid transporter protein genes with

RI Biochem. Biophys. Res. Commun. 247:

RN 121

RP NUCLEOTIDE SEQUENCE [LARGE SCALE MR
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STRAIN=BALB/c; TISSUE=Liver;
MEDLINE=98308102; PubMed=9642112; DOI=10.1006/bbrc.1998.8770;
MEDLINE=98308102; PubMed=98308102; PubMed=983
  07-MAR-2006, entry version 11.

Bile acyl-CoA synthetase (EC 6.2.1.7) (BACS) (Bile acid CoA ligase) (BAL CoA ligase) (Very long chain acyl-Co ligase) (Very long chain acyl-Co synthetase related protein) (VLACS-related) (VLACSR) (Fatty acid transport protein 5) (FATP-5) (Solute carrier family 27 member 5).

Name=Slc27a5; Synonyms=Acsb, Acsv16, Fatp5, Vlacsr;
   PROSITE;
SEQUENCE
  InterPro;
PRINTS; PR
  Konno H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M., Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A., Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K., Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watahiki M., Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y., RIKEN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer.";
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
Muroidea; Muridae; Murinae; Mus.
  Hori F., Iida J., Imamura K., Imotani K., Itoh M., Kanagawa S., Kawai J., Kojima M., Konno H., Murata M., Nakamura M., Ninomiya Nishiyori H., Nomura K., Ohno M., Sakazume N., Sano H., Sasaki D Shibata K., Shiraki T., Tagami M., Tagami Y., Waki K., Watahiki Muramatsu M., Hayashizaki Y.;

Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases.
   EMBL; AK144301; BAE25821.1; -; mRNA.
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  STRAIN=C57BL/6J; TISSUE=Gall bladder;
Arakawa T., Carninci P., Fukuda S., H
   NUCLEOTIDE SEQUENCE
  rger J., Truppe C., Neumann H., Forss-Petter S.; novel relative of the very-long-chain acyl-CoA synthetase and fatty
   GO:0005783; C:endoplasmic reticulum; TAS.
GO:0003824; F:catalytic activity; RCA.
GO:0004467; F:long-chain-fatty-acid-CoA ligase activity;
GO:0001676; P:long-chain fatty acid metabolism; TAS.
GO:0001672; P:metabolism; RCA.
GO:0008152; P:metabolism; RCA.
   family.
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; PS00455; AMP BINDING;
E 418 AA; 45626 MW;
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247:255-260(1998)
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C05738017FAFA781 CRC64;
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  689 AA
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RX MEDLINE=22388257; PubMedal 247932; DOI=10.1073/pnas.242603899;
RA Klausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausberg R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
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RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gunzatne P.H.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.",
RI G10 S.A., Schein J.E., Jones S.J.N., Marra M.A.;
RI G10 S.A., Schein J.E., Jones S.J.N., Marra M.A.;
RI G10 S.A., Schein J.E., Jones S.J.N., Marra M.A.;
RI G10 S.A., Schein J.E., Jones S.J.N., Marra M.A.;
RI G10 S.A., Schein J.E., Jones S.J.N., Marra M.A.;
RI G10 S.A., Schein J.E., Jones S.J.N., Marra M.A.;
RI G10 S.A., Schein J.E., Jones S.J.N., Marra M.A.;
  Synthetase family in bile acid synthesis and recycling.";

J. Biol. Chem. 277:24771-24779 (2002).

--- FUNCTION: Acyl-CoA synthetase involved in bile acid metabolism.

Proposed to catalyze the first step in the conjugation of C24 bile acids (choloneates) to glycine and taurine before excretion into bile canaliculi by activating them to their CoA thioesters. Seems to activate secondary bile acids entering the liver from the enterohepatic circulation (By similarity).

--- CATALYTIC ACTIVITY: ATP + cholate + CoA = AMP + diphosphate + choloyl-CoA.
   MEDLINE-98337965; PubMed=9871720, ---
Hirsch D., Stahl A., Lodish H.F.;
"A family of fatty acid transporters conserved from
                          Ensembl; ENSMUSG00000030382; Mus musculus.
MGI; MGI:1147100; Slc27a5.
GO; GO:0005783; C:endoplasmic reticulum; TAS.
GO; GO:0005615; C:extracellular space; TAS.
GO; GO:0016021; C:integral to membrane; TAS.
GO; GO:0004467; F:long-chain-fatty-acid-CoA ligase activity;
GO; GO:0001776; P:long-chain fatty acid metabolism; TAS.
  EMBL; AJ223959; CAA11688.1;
EMBL; BC013335; AAH13335.1;
EMBL; BC013272; AAH13272.1;
EMBL; AF072760; AAC40189.1;
EMBL; AF072760; AAC40189.1;
PIR; JW0107; JW0107.
   PubMed=11980911; DOI=10.
Mihalik S.J., Steinberg
Heinzer A.K., Dacremont
  STRAIN=FVB/N;
  Copyrighted by the UniProt Consortium, Distributed under the Creative Commons
   <del>-</del>
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   TISSUE
   NUCLEOTIDE SEQUENCE [MRNA] OF 28-689
  trinydroxy-5-beta-cholestan-26-oate + CoA = AMP + diphosphate + (25R) 3-alpha, 7-alpha, 12-alpha-trihydroxy-5-beta-cholestanoy1-CoA. SUBCELLULAR LOCATION: Endoplasmic reticulum, membrane. milti-care membrane.
   distribution.
SIMILARITY: E
   membrane; multi-pass membrane protein TISSUE SPECIFICITY: In liver expressed
  CATALYTIC ACTIVITY: ATP + (25R)-3-alpha,7-alpha,12-alpha-trihydroxy-5-beta-cholestan-26-oate + CoA = AMP + diphosp
  family.
   SPECIFICITY
IPR000873; AMP-bind
   Acad. Sci. U.S.A.
   TISSUE=Salivary
   Belongs
  PubMed=9671728; DOI=10.1073/pnas.95.15.8625;
A., Lodish H.F.;
   .1074/jbc.M203295200;
S.J., Pei Z., Park J., Kim do (
G., Wanders R.J., Cuebas D.A.,
   to the
   95:8625-8629 (1998)
  gland;
   mRNA.
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   (By similarity)
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RESULT 10
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  TOPO DOM
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   EMBL; CR860976; CAH93078.1; -; mRNA.
GO; GO:0004867; F:serine-type endopeptidase
InterPro; IPR000215; Prot inh serpin.
PANYHER; PTHR11461; Prot_inh_Serpin; 1.
  Bloecker H., Boecher M., Brandt P., Mewes H.W. Osanger A., Fobo G., Han M., Wiemann S.; Submitted (NOV-2004) to the EMBL/GenBank/DDBJ
  Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
  Q5R588 PONPY
Q5R588;
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Name=DKFZp459K2327;
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   Copyrighted
   The German cDNA Consortium;
  NUCLEOTIDE SEQUENCE.
   NCBI_TaxID=9600;
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   version 1.
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   ₩;
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Cytoplasmic
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C -> K (in R)
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   Score 10;
Pred. No.
  Score 9; Pred. No.
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05-JUL-2005,

integrated into

UniProtKB/TrEMBL

PRELIMINARY;

PRT;

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sequence version

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DT 25-OCT-2
DT 25-OCT-2
DT 07-FEB-2
DT 07-FE
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  07-FEB-2006, entry version Hypothetical protein precusion ORFNames=XfasoDRAFT_0863;
  Hall N., Karras M., Raine J.D., Carlton J.M., Kooij T.W.A., Berriman M., Florens L., Janssen C.S., Pain A., Christophides James K., Rutherford K., Harris B., Harris D., Churcher C.M., Quail M.A., Ormond D., Doggett J., Trueman H.E., Mendoza J., Bidwell S.L., Rajandream M.A., Carucci D.J., Yates J.R. III, Kafatos F.C., Janse C.J., Barrell B.G., Turner C.M.R., Waters
  NUCLEOTIDE SEQUENCE.

PubMed=15637271; DOI=10.1126/science.110

Hall N., Karras M., Raine J.D., Carlton

Berriman M., Florens L., Janssen C.S., F
  US DOE Joint Genome Institute (JGI-PGF);
Copeland A., Lucas S., Lapidus A., Barry K.,
Hammon N., Israni S., Pitluck S., Richardson
  Hypothetical SEQUENCE 5:
   STRAIN=Ann-1;
  STRAIN=Ann-1;
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   25-OCT-2005,
25-OCT-2005,
  Q3R079_XYLFA
   Science
   Plasmodium chabaudi.
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
   Hypothetical protein. ORFNames=PC405632.00.0;
   Submitted
   US DOE Joint Genome Institute
   NUCLEOTIDE SEQUENCE
   Submitted
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  NCBI_TaxID=155920;
   Xylella fastidiosa Ann-1.
  Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms Distributed under the Creative Commons Attribution-NoDerivs License
   transcriptomic,
  Sinden R.S.;
   NCBI_TaxID=5825;
   05-JUL-2005,
07-FEB-2006,
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   307:82-86 (2005).
   ION: The sequence shown here is derived /GenBank/DDBJ whole genome shotgun (WGS)
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   (AUG-2005)
   (AUG-2005)
   Land M.;
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   Israni S., Pitluck S., Richardson P.;
of the draft genome and assembly of Xylella
   Conservative
  protein.
2 AA; 58
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  and
  DOI=10.1126/science.1103717;
  17
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  447EAA6E9ECE9802 CRC64;
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GO; GO:005635; C:nuclear envelope; IDA.
GO; GO:0006632; P:apoptotic program; IDA.
GO; GO:0006917; P:induction of apoptosis; INON TER
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurogna
Muroidea; Muridae; Murinae; Mus.
   Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms Distributed under the Creative Commons Attribution-NoDerivs License
  Name=Scotin;
   Scotin (Fragment).
   Hypothetical protein; SIGNAL 1 47
   Copyrighted by the UniProt Consorcium, Distributed under the Creative Commons
   Hammon N., Israni S., Pitluck S., Richardson P.; Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases
   J. Cell Biol. 158:235-246(2002).
  NUCLEOTIDE SEQUENCE.
   NCBI_TaxID=10090;
  Mus musculus (Mouse)
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  EMBL; AAAM03000109; EAO30628.1; -; Genomic
  Copeland A.,
  US DOE Joint Genome Institute
   Submitted
  "Scotin, a novel p53-inducible proapoptotic and the nuclear membrane.";
  -
   CAUTION: The sequence shown here is derived from an EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which preliminary data.
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   Genome Institute; (JUL-2002) to the
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   ın; Signal.
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   to the EMBL/GenBank/DDBJ databases
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  Lapidus A.,
  program; IDA.
of apoptosis;
   0;
   0,
   Score 9;
Pred. No
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Pred. No.
   DBB52F2072BE48AB
   3FB82714ECE41233
   Potential
  (JGI-PGF);
s A., Barry K.,
  Genomic_DNA.
INED; Genomic_DNA.
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RESULT 14

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ID QTNET5.
DT 15-DEC-2003, s
DT 16-DEC-2003, s
DT 16-DEC-2003,
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AC QBMKI6;
DT 01-CCT-2002, s
DT 01-CCT-2002, s
DT 01-FEB-2006, e
DE Prepro-orexin
GN Name-BORX;
OS BOS taurus (Bo
CC Eukaryota; Met
OC Mammalia; Euth
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15-DEC-2003, integrated into Unil
15-DEC-2003, sequence version 1.
07-FEB-2006, entry version 10.
GS14005 protein.
   EMBL; AB084625; BAB91446.1; -; mRNA.
Ensembl; ENSBTAG0000000665; Bos taurus.
GO; GO:0007631; P:feeding behavior; IEA.
GO; GO:0007218; P:neuropeptide signaling pathway; IEA.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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BioCyc; GVIO251221:GSL4005-MONOMER; -.
Complete proteome.
SEQUENCE 96 AA; 11018 MW; 1C2FF96435784E92 CRC64;
  "Complete genome structure of Gloeobacter violaceus PCC 7421, a cyanobacterium that lacks thylakoids."; DNA Res. 10:137-145(2003).
  NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA].

STRAIN=PCC 7421;

MEDLINE=22977040; PubMed=14621292; DOI=10.1093/dnares/10.4.137;

Nakamura Y., Kaneko T., Sato S., Mimuro M., Miyashita H., Tsuchiya Sasamoto S., Watanabe A., Kawashima K., Kishida Y., Kiyokawa C., Kohara M., Matsumoto M., Matsuno A., Nakazaki N., Shimpo S., Takeuchi C., Yamada M., Tabata S.;
  Gloeobacter violaceus.
Bacteria; Cyanobacteria; Gloeobacteria; Gloeobacterales; Gloeobacter.
NCBI_TaxID=33072;
   01-OCT-2002, integrated into UniProtKB/TrEMBL. 01-OCT-2002, sequence version 1. 07-FEB-2006, entry version 9.
  Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms Distributed under the Creative Commons Attribution-NoDerivs License
   Watanabe K., Aso H., Sato T., Tahara K., Takano S., Yamaguchi T.; Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.
  OrderedLocusNames=gs14005;
   Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms Distributed under the Creative Commons Attribution-NoDerivs License
                  PANTHER; PTHR15173;
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Watanabe K., Aso H.,
  Prepro-orexin (Fragment).
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   99 AA.
  DB 2;
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  Pfam; PF02072; Orexin; 1. PRINTS; PR01091; OREXINPP. NON TER 99 99
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100.0%; Pr
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Search completed: June 6, 2006, 21:14:29 Job time: 296 secs

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GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd
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| 45                 | 44                 | 43                 | 42                 | 41                 | 40                 | 39                 | 38                 | 37                 | 36                | 35                 | 34                 | ω<br>ω            | 32                | 31                | 30                 |
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| 318                | 304                | 291                | 285                | 263                | 259                | 249                | 245                | 244                | 231               | 220                | 220                | 208               | 208               | 208               | 206                |
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| 159301             | T02679             | B60131             | JC5639             | S57346             | A71537             | A35842             | CIHUQC             | S18948             | A49265            | I58343             | 843291             | AC0465            | AC0991            | T06492            | A55412             |
| bone marrow stroma | probable RNA-bindi | homeotic protein X | 1-acylglycerol-3-p | interleukin 15 rec | probable n-acetylm | chymase (EC 3.4.21 | complement subcomp | centrocyclin precu | flt3/flk-2 ligand | flt3 ligand isofor | FLT3/FLK2 ligand ( | probable membrane | probable membrane | ribosomal protein | lymphocyte phospha |

## ALIGNMENTS

RESULT 1

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C;Genetics:
A;Gene: yhhN
C;Superfamily: Escherichia coli hypothetical protein o208
  probable enzyme yhhN [imported] - Escherichia coli (strain 0157:H7, substrain C;Species: Escherichia coli C;Species: Escherichia coli C;Date: 16-Feb-2001 #sequence_revision 16-Feb-2001 #text_change 09-Jul-2004 C;Accession: E86014 C;Accession: E86014 [II, G.; Burland, V.; Mau, B.; Glasner, J.D.; Rose, D. R;Perna, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glasner, J.D.; Rose, D. iller, L.; Grotbeck, E.J.; Davis, N.W.; Lim, A.; Dimalanta, E.; Potamousis, K. Nature 409, 529-533, 2001
   cids.
C;Superfamily: Mycobacterium tuberculosis probable :
F;169-647/Domain: acetate-CoA ligase homology <ACL>
   R;Berger, J.; Truppe, C.; Neumann, H.; Forss-Petter, S. Biochem. Biophys. Res. Commun. 247, 255-260, 1998
Biochem. Biophys. Res. Commun. 247, 255-260, 1998
A;Title: A novel relative of the very-long-chain acyl-CoA synthetase and fatty acid transpared to the control of the con
  N;Alternate names: VLACSR
C;Species: Mus musculus (house mouse)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Accession: JW0107
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A;Molecule type: DNA
A;Residues: 1-208 <STO>
A;Cross-references: UNIPROT:P37616; UNIPARC:UPI0000165965; GB:AE005174; NID:g12518127;
A;Experimental source: strain 0157:H7, substrain EDL933
  A;Title: Genome sequence of enterohemorrhagic Escherichia coli 0157:H7. A;Reference number: A85480; MUID:21074935; PMID:11206551 A;Accession: E86014
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A;Experimental source: liver
C;Comment: This protein likely functions as a plasma membrane transporter of long chain
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   very-long-chain acyl-CoA synthetase related protein - mouse
   E86014
  JW0107
  Superfamily: Mycobacterium tuberculosis probable fadD6 protein;
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  Similarity
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   Score 10;
Pred. No.
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  DB 1;
   0.13;
     Length 208;
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  acetate-CoA ligase hom
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   EDL933)
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R;Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; I gasawara, N.; Yasunaga, T.; Kuhara, S.; Shiba, T.; Hattori, M.; Shinagawa, H. DNA Res. 8, 11-22, 2001
A, Title: Complete genome sequence of enterohemorrhagic Escherichia coli 0157:H7
A;Reference number: A99629; MUID:21156231; PMID:11258796
A;Accession: E91168
  Science 277, 1453-1462, 1997
A;Title: The complete genome sequence of Escherichia coli
A;Reference number: A64720; MUID:97426617; PMID:9278503
A;Accession: G65143
A;Status: preliminary; nucleic acid sequence not shown; tr
ß
  hypothetical protein o208 - Escherichia
N;Alternate names: hypothetical protein
C;Species: Escherichia coli
  A;Molecule type: DNA
A;Residues: 1-208 <HAY>
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C;Accession: E91168
  probable enzyme [imported] C; Species: Escherichia coli
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  R;Blattner, F.R.; Plunkett III, A.; Rose, D.J.; Mau, B.; Shao,
  submitted to the EMBL Data Library, A;Reference number: S47666 A;Accession: S47687
  R; Plunkett, G.
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  A;Status: preliminary
  A; Molecule type: DNA
  A; Molecule type: DNA
A; Residues: 1-208 < PLU>
  A;Status: preliminary
  A;Residues: 1-208 <BLAT>
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  Cross-references: UNIPROT:P37616; UNIPARC:UPI000013B251; EMBL:U00039; Blattner, F.R.; Plunkett III, G.; Bloch, C.A.; Perna, N.T.; Burland, VA.; Rose, D.J.; Mau, B.; Shao, Y.
  ;Date: 27-Jan-1995 #sequence_revision 27-Jan-1995 #text_change 09-Jul-2004;Accession: S47687; G65143
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  March 1994
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RESULT 5
335940
class I histocompatibility antigen DLA-6.7B - dog
C;Species: Canis lupus familiaris (dog)
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995
  Eur. J. Biochem. 173, 163-169, 1988
A;Title: Genomic and cDNA cloning of the human C1 inhibitor.
A;Reference number: S00403; MUID:88185313; PMID:3267220
A;Accession: S00403
  R;Burnett, R.C.
submitted to the EMBL Data Library, August 1993
A;Description: Molecular analysis of a canine MHC
  R;Bock, S.C.; Skriver, K.; Nielsen, E.; Thogersen, H.C.; Wiman, B.; Donaldson, Biochemistry 25, 4292-4301, 1986
A;Title: Human C1 inhibitor: primary structure, cDNA cloning, and chromosomal lA;Reference number: A24161; MUID:87000544; PMID:3756141
A;Accession: A24161
  complement C1 inhibitor precursor [validated] - human C;Species: Homo sapiens (man) C;Species: Homo sapiens (man) C;Catte: 30-Sep-1991 #sequence revision 30-Sep-1991 #text change 05-Oct-2004 C;Accession: S15386; S00403; Ā38781; B38781; A24161; A38782; S03370; A34847; C;Accession: S.;Duponchel, C.; Tosi, M.; Fothergill, J.E. Bur. J. Biochem. 197, 301-308, 1991
Bur. J. Biochem. 197, 301-308, 1991
A;Title: Complete nucleotide sequence of the gene for human C1 inhibitor with
  A;Introns: 30/1; 121/1; 213/1; 305/1; 343/1; 359/1; C;Superfamily: class I histocompatibility antigen; F;226-291/Domain: immunoglobulin homology <IMM>
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A;Cross-references: UNIPROT:P05155; UNIPARC:UPI000000123F;
R;Carter, P.E.; Dunbar, B.; Fothergill, J.E.
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   C1 inhibitor with
   Intron-exon
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   Gaps
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   an unusual]
  V.H.; Eddy
  PIDN
  PID
  DIG
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  PII
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BIOCHEMISTRY 22, 5001-5007, 1983
A,Title: Human CI inhibitor: improved isolation and preliminary structural characteriza A;Reference number: A05286; MUID:84053355; PMID:6416294
A;Accession: S15085
   A; Molecule type: mRNA
A; Residues: 187, 'K', 189-408, 413-500 <QU2>
A; Cross-references: UNIPARC: UPI00001731C3;
R; Tosi, M.; Duponchel, C.; Bourgarel, P.; C
Gene 42, 265-272, 1986
A; Molecule type: protein
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A; Cross-references: UNIPARC: UPI00001731CC; UNIPARC: UPI00001731CD
A; Cross-references: UNIPARC: UPI00001731CC; Rosen, F.S.; Davis III,
Proc. Natl. Acad. Sci. U.S.A. 87, 6786-6790, 1990
A; Title: Dysfunctional C1 inhibitor Ta: deletion of Lys-251 resu.
   R;Salvesen, G.S.; Catanese, J.J.; Kress, L.F.; Travis, J. Biol. Chem. 260, 2432-2436, 1985
A;Title: Primary structure of the reactive site of humanistrates number: S15086; MUID:85130986; PMID:391900
A;Accession: S15086
   A;Cross-references: UNIPARC:UPI000016A614; EMBL:M14036; NID:g179616; PIDN:AAA51848.1; PI R;Davis III, A.E.; Whitehead, A.S.; Harrison, R.A.; Dauphinais, A.; Bruns, G.A.P.; Cicax Proc. Natl. Acad. Sci. U.S.A. 83, 3161-3165, 1986
A;Title: Human inhibitor of the first component of complement, C1: characterization of C2, Reference number: A23936; MUID:86205856; PMID:3458172
   Gene 42, 265-272, 1986
A;Title: Molecular cloning of human C1 inhibitor: sequence homologies with alpha(1)-ant A;Reference number: S15529; MUID:86276001; PMID:3089875
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A;Residues: 241-314,'QLQKLSY',321,'M',323-331,'L',333-369,'TGTGSQ',376-416,'V',418-438,
A;Cross-references: UNIPARC:UPI0001731C4; EMBL:M13203
   Biochem. Biophys. Res. Commun. 137, 620-625, 1986
A;Title: Isolation and analysis of a cDNA coding for human C1 inhibitor.
A;Reference number: A24258; MUID:86268965; PMID:3488058
A;Accession: A24258
  R;Rauth, G.; Schumacher, G.; Buckel, P.; Mueller-Esterl, W. Protein Seq. Data Anal. 1, 251-257, 1988
A;Title: Molecular cloning of the cDMA coding for human C1(-)
A;Reference number: S03370; MUID:88276848; PMID:3393514
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   A;Note: the authors translated the A;Accession: A38783
   A; Molecule type: mRNA
A; Residues: 213-500 <TOS>
  R;Stoppa-Lyonnet, D.; Carter, P.E.; Meo, T.; Tosi, M.
Proc. Natl. Acad. Sci. U.S.A. 97, 1551-1555, 1990
A;Title: Clusters of intragenic Alu repeats predispose the human Cl inhibitor locus to A;Reference number: A34847; MUID:90160364; PMID:2154751
  A; Accession: A23936
  A; Accession: S15084
  A; Reference number: S15084
  submitted to the EMBL Data Library,
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  Accession: S15529
   Molecule type: mRNA
   Accession: A34847
   DNA
   tound
  codon CTG
   November 1986
   deletion of Lys-251 results in
   Colomb,
  site of human PMID:3919001
  EMBL:M13690
   GB:M30688
  for residue 332
  Meo,
  C1-inhibitor
   H
  as Val
   inhibitor
   A.E.
   acquisition
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                                C; Accession: JC4980
R; Kameyama, T.; Murakami, Y.;
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plexin 1 precursor - mouse
C;Species: Mus musculus (house mouse)
C;Date: 31-Dec-1996 #sequence_revision
C;Accession: JC4980
  F;48,71,83,88,92,96/Binding site: carbohydrate (Thr) (covalent) #statu F;64/Binding site: carbohydrate (Ser) (covalent) #status experimental F;72,99,106,107,111,115,118,119/Binding site: carbohydrate (Thr) (covalent) #status experimental F;466/Inhibitory site: Arg (complement C1) #status experimental
   A; Cross-references: GDB:119041; OMIM:106100
A; Map position: 11q12.1-11q13.1
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C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Jun-2000 #sequence_revision 02-Jun-2000 #text_change
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A; Residues: 1-537 < DAN>
  A; Reference number: Z25017
A; Accession: T49162
   R;D'Angelo, M.; Vezzi, A.; Modesto, D.; Pigazzi, M.; Valle, submitted to the Protein Sequence Database, April 2000
  F;120-500/Domain: inhibitory #status predicted <INH>F;25,69,81,238,253,352/Binding site: carbohydrate (Asn)F;48,71,83,88,92,96/Binding site: carbohydrate (Thr) (co
  A;Cross-references: UNIPARC:UPI00001731CE
A;Note: Lys-251 was deleted in protein isolated from a patient with type II hereditary
C;Comment: This protein inhibits the serine proteinase activity in complement factors (
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  94/3; 150/3; 342/3; 443/3
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  Rudd,
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Biophys. Res.

Commun.

Suto, 1. 226,

F.; Kawakami, 524-529, 1996

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p15E protein - simian sarcoma virus (fragment)
(;Species: simian sarcoma virus
C;Date: 31-Mar1991 #sequence_revision 31-Mar-1991 #text_change
C;Accession: A03982
R;Devare, S.G.; Reddy, E.P.; Law, J.D.; Robbins, K.C.; Aaronson,
Proc. Natl. Acad. Sci. U.S.A. 80, 731-735, 1983
A;Title: Nucleotide sequence of the simian sarcoma virus genome:
A;Reference number: A03982; MUID:83144004; PMID:6298772
A;Accession: A03982
  C;Date: 30-569 .... C;Accession: S05486
C;Accession: S05486
R;Huttly, A.K.; Martienssen, R.A.; Baulcombe, R;Huttly, A.K.; Martienssen, A;Huttly, A;Huttly,
   sence of calcium ions.
()Keywords: duplication; transmembrane protein
()Fi1-22/Domain: signal sequence #status predicted <SIG>
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A;Molecule type: mRNA
A;Residues: 1-1894 <KAM>
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A;Experimental source: brain
C;Comment: This protein is a membrane protein, and plays a role in reuronal cell conta
  A;Pathway: glycogen/starch degradation
C;Superfamily: alpha-amylase, plant type; alpha-amylase core homology
C;Keywords: glycosidase; hydrolase; polysaccharide degradation
  F;1238-1264/DUMALL. -----
F;1266-1268/Region: hydrophilic
   A;Title: Identification of a neuronal cell surface molecule, A;Reference number: JC4980; MUID:96400291; PMID:8806667 A;Accession: JC4980
  A;Introns: 32/3
C;Function:
A;Description: catalyzes the hydrolysis of internal 1,4-alpha-D-glucosidic bonds
   Mol. Gen. Genet. 214, 232-240, 1988
A;Title: Sequence heterogeneity and differential expression
A;Reference number: S05486; MUID:89181522; PMID:2467183
A;Accession: S05486
   alpha-amylase (EC 3.2.1.1) 2.34 precursor - wheat (fragment) C;Species: Triticum aestivum (common wheat) C;Date: 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change C;Accession: S05486
                                 A; Molecule type:
A; Residues: 1-77
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   C;Genetics:
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  A; Molecule type: DNA
A; Residues: 1-53 < HUT>
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   A03982
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sporozoite antigen - Eimeria tenella (fragment) C;Species: Eimeria tenella (C;Date: 09-OCt-1922 #sequence_revision 09-Oct-1 C;Accession: A60111
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C;Superfamily: type C
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  LLLLLLLL 13
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   R;Anisowicz, A.; Bardwell, L.; Sager, R.
Proc. Natl. Acad. Sci. U.S.A. 84, 7188-7192, 1987
A;Title: Constitutive overexpression of a growth-regulated A;Reference number: A94184, MUID:88041072; PMID:2890161
A;Accession: B28414
   R;Li, H.M.; Moore, T.; Keegstra, K.
Plant Cell 3, 709-717, 1991
A;Title: Targeting of proteins to the outer envelope membrane uses
A;Reference number: JQ1181; MUID:93044506; PMID:1841725
A;Accession: JQ1181
  outer envelope membrane 14K protein, chloroplast - garden pea
C;Species: Pisum sativum (garden pea)
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 19-Jan-1996
   growth-regulated protein precursor - Chinese hamster
C;Species: Cricetulus griseus (Chinese hamster)
C;Date: 30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 09-Jul-2004
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C;Species: Mus musculus (house mouse)
C;Date: 30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change 09-Jul-2004
C;Accession: JC2202; S34214
R;Lan, M.S.; Kajiyama, W.; Donadel, G.; Lu, J.; Notkins, A.L.
Biochem. Biophys. Res. Commun. 200, 1066-1071, 1994
A;Title: cDNA sequence and genomic organization of mouse secretin.
A;Reference number: JC2202; MUID:94234995; PMID:8179583
  A;Cross-references: UNIPROT:Q08535; UNIPARC:UPI0000026321; EMBL:X73580; NID:g313710; PID C;Comment: This protein regulates the secretion of pancreatic juices and stimulates insu C;Superfamily: glucagon C;Keywords: amidated carboxyl end; duplication; hormone; secretagogue C;Keywords: amidated carboxyl end; duplication; hormone; secretagogue F;1-27/Domain: signal sequence #status predicted <SIG>F;1-27/Domain: signal sequence #status predicted <PRO>F;32-88/Product: prosecretin #status predicted <MAT>
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   R;Tanaka, A.; Ishiguro, N.; Shinagawa, M. submitted to JIPID, May 1990
A;Description: Sequence analysis of boving
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C;Species: Bos primigenius taurus (cattle)
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 30-May-1997
C;Accession: PQ0059
  B
   Ś
   R;Miller, G.A.; Bhogal, B.S.; McCandliss, R.; Strausberg, R.L.; Jessee, E.J.; Anderson, Infect. Immun. 57, 2014-2020, 1989
A;Title: Characterization and vaccine potential of a novel recombinant coccidial antigen A;Reference number: A60111; MUID:89277516; PMID:2659532
A;Accession: A60111
A;Status: preliminary
   A;Accession: JC2202
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  Matches
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les 8; Conservative 0; Mismatches
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|            | 52                  | 52                  | 52                  | 52                  | 52                  | 52                  | 52                  | 52.5            | 52.5                | 52.5                | 52.5                | 52.5             | 52.5             |                  | 52.5              |                  |                  |                  |                  |                  |
|            | 13.5                |                     |                     | 13.5                |                     |                     |                     |                 |                     |                     | 13.6                |                  |                  |                  | 13.6              |                  |                  |                  |                  | 13.6             |
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| ALIGNMENTS | US-10-953-349-22036 | US-10-953-349-22037 | US-10-953-349-22187 | US-10-953-349-23919 | US-10-953-349-23920 | US-10-953-349-40121 | US-10-953-349-23921 | US-11-318-939-6 | US-10-953-349-20597 | US-10-953-349-20598 | US-10-953-349-20599 | US-10-511-455-29 | US-10-511-455-27 | US-10-511-455-15 | US-10-505-928-399 | US-10-511-455-28 | US-10-511-455-17 | US-10-511-455-21 | US-10-511-455-25 | US-10-511-455-23 |
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|            | 22036, A            | 22037, A            | 22187, A            | 23919, A            | 23920, A            | 40121, A            | 23921, A            | 6, Appli        | 20597, A            | 20598, A            | 20599, A            | 29, Appl         | 27, Appl         | 15, Appl         | 399, App          | 28, Appl         | 17, Appl         | 21, Appl         | 25, Appl         | 23, Appl         |

## CURRENT APPLICATION NUMBER: US/11/101,316 CURRENT FILING DATE: 2005-04-06 PRIOR APPLICATION NUMBER: 10/063526 PRIOR FILING DATE: 2002-05-03 PRIOR FILING DATE: 2002-05-03 PRIOR FILING DATE: 2001-12-06 PRIOR APPLICATION NUMBER: 10/06867 PRIOR APPLICATION NUMBER: PCT/US00/23328 PRIOR APPLICATION NUMBER: PCT/US09/23328 PRIOR FILING DATE: 1999-08-24 PRIOR APPLICATION NUMBER: PCT/US99/12252 PRIOR FILING DATE: 1999-08-25 PRIOR APPLICATION NUMBER: PCT/US99/12252 PRIOR FILING DATE: 1999-06-02 PRIOR APPLICATION NUMBER: PCT/US99/12252 PRIOR APPLICATION NUMBER: PCT/US99/12252 PRIOR APPLICATION NUMBER: PCT/US99/12252 PRIOR FILING DATE: 1999-06-02 PRIOR FILING DATE: 1998-06-02 NUMBER OF SEQ ID NOS: 170 SEQ ID NO 30 LENGTH: 73 Sequence 30, Application US/11101316 Publication No. US20060099657A1 GENERAL INFORMATION: APPLICANT: Goddard, Audrey APPLICANT: Godowski, Paul J. APPLICANT: Grimaldi, Christopher J. APPLICANT: Gurney, Austin L. APPLICANT: Gurney, Austin I. APPLICANT: Wood, William I. 밁 Ş RESULT 1 US-11-101-316-30 ; ORGANISM: Homo Sapien US-11-101-316-30 Matches Query Match Best Local Similarity TITLE OF INVENTION: ANTIBODIES TO A POLYPEPTIDE ENCODED BY A NUCLEIC ACID TITLE OF INVENTION: UNDEREXPRESSED IN MELANOMA FILE REFERENCE: P3230R1C17C1 TYPE: PRT \_ $\vdash$ MILLTLLLLLLKGSCLEWGLVGAQKVSSATDAPIRDWAFFPPSFLCLLPHRPAMTCSQ MILLITLILLILIKGSCLEWGLVGAQKVSSATDAPIRDWAFFPPSFLCLLPHRPAMTCSQ 60 100.0%; Score 386; DB 7; ilarity 100.0%; Pred. No. 1.8e-40; Conservative 0; Mismatches 0; Length Indels 73; 0 Gaps

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  RESULT 3
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TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT PILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: PRICHING Version 3.3
LENGTH: 124
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Publication No. US20060107345A1

GENERAL INFORMATION:

APPLICANT: ALEXANDROV, Nickolai et al.

TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES

TITLE OF INVENTION: ENCONDED THERBY

FILE REFERENCE: 2750-1579PUS2
  NUMBER OF SEQ ID NOS: 40252
SOFTWARE: PatentIn version 3.3
SEQ ID NO 30624
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   -10-953-349-14154
   APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DI
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
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; Publication No. US20060088836A1
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   US-10-953-349-14154
APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
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CURRENT FILING DATE: 2004-10-19
PRIOR APPLICATION NUMBER: PCT/US2003/012946
PRIOR FILING DATE: 2003-04-24
PRIOR APPLICATION NUMBER: US 10/131,831
PRIOR PILING DATE: 2002-04-24
PRIOR FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: US 10/325,899
PRIOR FILING DATE: 2002-12-20
  APPLICANT: Morris, MacDonald
APPLICANT: Rosenberg, Steven
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING
TITLE OF INVENTION: AND MONITORING TRANSPLANT REJECTION
FILE REFERENCE: 506612000104
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CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: PatentIn version 3.3
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CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: Patentin version 3.3
SEQ ID NO 10907
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Publication No. US20060107345A1
GENERAL INFORMATION:
APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
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  APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-PETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCOUNDED THERBY
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CURRENT FILING DATE: 2002-07-16
PRIOR APPLICATION NUMBER: US/10/196,749
CURRENT FILING DATE: 2002-07-16
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PRIOR FILING DATE: 2002-01-15
PRIOR PRIOR DATE: 1997-09-18
PRIOR PRILING DATE: 1997-09-18
PRIOR PILING DATE: 1997-09-18
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   TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3430R1C340
   APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579US2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
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  APPLICANT: Baker, Kevin P.
  NUMBER OF SEQ ID NOS: 40252
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  APPLICANT:
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LOCATION: (81)..(81)
OTHER INFORMATION: Xaa can
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  FILING DATE:
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Prior Application data removed
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US-10-953-349-35815
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Publication NO. US20060107345A1
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TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
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CURRENT FILING DATE: 2004-09-30
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CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
  APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
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OPERATING SYSTEM: Apple Operating System 7.5.
SOFTWARE: Microsoft Word for PowerMacintosh,
   CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex
  NUMBER OF SEQUENCES:
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  STATE: WA
  CITY: Seattle
   STREET: 51 University
  ZIP: 98101
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US-10-953-349-27987, Application US/10953349

i Sequence 27987, Application US/10953349

publication No. US20060107345A1

GENERAL INFORMATION:
APPLICANT: ALEXANDROV, Nickolai et al.
APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERNINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES

TITLE OF INVENTION: ENCONDED THERBY

FILE REFERENCE: 2750-1579PUS2

CURRENT PELICATION NUMBER: US/10/953,349

CURRENT FILING DATE: 2004-09-30

NUMBER OF SEQ ID NOS: 40252

SOFTWARE: Patentin version 3.3

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LENGTH: 85

TYPE: PRT

ORGANISM: Triticum aestivum

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TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
US-11-312-797-2
Search completed: June 6, 2006, 21:54:32 Job time: 17 secs
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FILING DATE: 20-Dec-2005
CLASSIFICATION: 530
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APPLICATION NUMBER: US/08/978,773
APPLICATION NUMBER: USS/08/978,773
APPLICATION NUMBER: USS/08/052,525
FILING DATE: 27 NOVEMBER 1996
ATTORNEY/AGENT INFORMATION:
   NAME: Perkins, Patricia Anne
REGISTRATION NUMBER: 34,693
REFERENCE/DOCKET NUMBER: 2623-A
TELECOMMUNICATION INFORMATION:
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m Match 100%
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| Sequence 5, Appli Sequence 26, Appli Sequence 27, Appli Sequence 26, Appli Sequence 27, Appli Sequence 26, Appli Sequence 261, App Sequence 261, App Sequence 261, App Sequence 106334, Sequence 112018, Sequence 171523, Sequence 171524, App Sequence 2754, Appli Sequence 27554, Appli Sequence 27 | equence 940, Ap<br>equence 1575, A                             |
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| RESULT 1  US-10-012-231A-22  Sequence 22, Applica  Patent No. 6924355  Patent No. 6924355  APPLICANT: Baker, K  APPLICANT: Betstei  APPLICANT: Betstei  APPLICANT: Ferrara  APPLICANT: Gadowsk  APPLICANT: Goddard  APPLICANT: Goddard  APPLICANT: Goddard  APPLICANT: Hillan,  APPLICANT: Hillan,  APPLICANT: Hillan,  APPLICANT: Hillan,  APPLICANT: Paoni,  APPLICANT: Hillan,  APPLICANT: Joyney  APPLICANT: Joyney  APPLICANT: Joyney  APPLICANT: Hillan,  APPLICANT: Joyney  AP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            | 22226666666666666666666666666666666666                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| 1A-22 2, Application US 692435N FORMATION: Baker, Kevin P. Botstein, Davi Desnoyers, Luc Eaton, Dan 1. Ferrara, Napol Fong, Sherman Goddard, Audre Goddwski, Paul Grimaldi, Chri Grimaldi, Chri Grimaldi, Chri Gurney, Austin Hillan, Kennet Pan, James Panoni, Nichola INVENTION: Secret RINCENTION: Neids RENCE: P2830PL26 RENCE: P2830PL3 ILING DATE: 2002                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            | 16.2<br>16.1<br>16.1<br>16.1<br>16.1<br>16.1<br>15.1<br>15.1<br>15.2<br>15.3<br>15.7<br>15.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 22, Application US/100 21 Baker, Kevin P. 21 Baker, Kevin P. 21 Baker, Kevin P. 21 Baker, Kevin P. 21 Fearon, Dan 1. 21 Ferrara, Napoleone 21 Ferrara, Napoleone 22 Tread, Audrey 23 Tread, Audrey 24 Goddard, Audrey 25 Goddard, Audrey 26 Gorney, Austin L. 21 Hillan, Kenneth J. 22 INVENTION: Secreted a 25 INVENTION: Secreted a 25 INVENTION: Secreted a 26 INVENTION: Secreted a 27 INVENTION: Acids Encerence: P2830P1C23 28 APPLICATION NUMBER: US 25 FILING DATE: 2002-06-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            | 307<br>484<br>896<br>1238<br>1238<br>1240<br>1240<br>1574<br>578<br>274<br>274<br>274<br>274<br>274                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | *          | 2 US-09-2 US-08-2 US-0 |
| ool2231A  ne opher J. J. J. F. and Transmembrane ncoding the Same US/10/012,231A 6-10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ALIGNMENTS | 252-991A-<br>2548-796-878-1<br>585-888-1<br>270-878-1<br>270-878-1<br>270-878-1<br>270-878-1<br>270-878-1<br>270-85-1<br>270-95-1<br>481-9858-1<br>481-9858-1<br>481-9858-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Polypeptides                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            | 132304<br>177959<br>144<br>145<br>165<br>165<br>165<br>165<br>168<br>168<br>168<br>168<br>168                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| and.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |            | sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence<br>sequence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Nucleic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |            | 32304, A<br>17759, Appl<br>17, Appl<br>17, Appl<br>17, Appl<br>14, Appl<br>37, Appl<br>37, Appl<br>37, Appl<br>15, Appl<br>26, Appl<br>2654, Appl<br>105, App<br>105, App<br>105, App<br>105, App<br>105, App                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

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61

AQPRGEGEKVGDG 73

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APPLICANT: Ferrara, Napoleon
APPLICANT: Fong, Sherman
   CURRENT APPLICATION NUMBER: US/10/015,389A
CURRENT FILING DATE: 2002-06-25

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APPLICANT: Paoni, Nicholas F.
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APPLICANT: Botstein, David
APPLICANT: Botsnoyers, Luc
APPLICANT: Eaton, Dan 1.
APPLICANT: Ferrara, Napole
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APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
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PRIOR APPLICATION NUMBER: 60/098749
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PRIOR PILING DATE: 1998-09-01
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APPLICANT: Botstein, David
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APPLICANT: Eaton, Dan 1
APPLICANT: Ferrara, Napo
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qian
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60/103396

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APPLICANT: Baker, F
APPLICANT: Botstei
APPLICANT: Desnoye
APPLICANT: Eaton,
APPLICANT: Ferrarz;
APPLICANT: Fong, S
APPLICANT: Gao, We
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   oryza sativ
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  drosophila
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tetraodon n
   mus musculu
   bartonella
  homo sapien
   neurospora
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thauera aro
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   rattus norv
  xenopus
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  trypanosoma
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AC QGUWT3, 2004, i
DT 05-JUL-2004, s
DT 07-FEB-2006, e
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  WEDLINE-22867296; PubMed=12975309; DOI=10.1101/gr.1293003;
A Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D.T., Brush J.,
Chen J., Chow B., Chui C., Crowley C., Currell B., Deuel B., Dowd P.,
A Chen J., Chow B., Chui C., Crowley C., Currell B., Deuel B., Dowd P.,
A Eaton D., Foster J.S., Grimaldi C., Gu Q., Hass P.E., Heldens S.,
A Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J.,
A Huang A., Kim H.S., Klimowski E., Sanchez C., Schoenfeld J.,
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A Yansura D.G., Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A.D.,
A Wood W.I., Godowski P.J., Gray A.M.;
Wood W.I., Godowski P.J., Gray A.M.;
"The secreted protein discovery initiative (SpDI), a large-scale
"The secreted protein discovery initiative (SpDI), a large-scale
"The secreted protein discovery initiative (SpDI), a large-scale
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"Genome Res. 13:2265-2270(2003).
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SEQUENCE 73 AA; 7879 MW; A99C96797BCC4D91 CRC64;
  Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms Distributed under the Creative Commons Attribution-NoDerivs License
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Maximum Minimum

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A Maucell E., Bouneau L., Fischer C., Ozouf-Costaz C., Bernot A.,

A Nicaud S., Jaffe D., Fisher S., Lutfalla G., Dossat C., Segurens B.,

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ORFNames=CG32634;
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   Genoscope; Whitehead Institute Centre for Genome Researc Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
  the early vertebrate proto-karyotype."; Nature 431:946-957(2004).
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  Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms Distributed under the Creative Commons Attribution-NoDerivs License
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   Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms Distributed under the Creative Commons Attribution-NoDerivs License
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   Wang Z.-Y., Wassarman D.A., Weinslock G.H., P., Pace Q.A., Williams S.M., Woodage T., Worley K.C., W.D., Yang S., Yao Q.A., Yao J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L., Zheng X.H., Zhong F.N., Zhong W., Zhou X., Zhu S., Zhu X., Smith H.O., Zheng X.H., Zhou F.N., Rubin G.M., Venter J.C.; "The genome sequence of Drosophila melanogaster."; Science 287:2185-2195(2000).
   EMBL; AEC
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  "Drosophila melanogaster release Submitted (MAR-2000) to the EMBL/
   Berkeley Drosophila Genome Project;
Celniker S., Carlson J., Wan K., Pf
Hoskins R., Stapleton M., Pacleb J.
   "The transposable elements of the Drosophila melanogaster a genomics perspective.";
  Kaminker J.S., Bergman C.M., Kronmiller Patel S., Frise E., Wheeler D.A., Lewis Ashburner M., Celniker S.E.,
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   Distributed under the Creative Commons Attribution-NoDerivs License
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   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
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  225:384-391 (2002).
   by the UniProt Consortium, see http://www.uniprot.org/tounder the Creative Commons Attribution-NoDerivs License
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"Generation and initial analysis of more than 15,000 full-length human
"Generation and initial analysis of more than 15,000 full-length human
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   Copyrighted by the UniProt Consortium, Distributed under the Creative Commons
   Klein S., Gerhard D.S.; Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
   16-AUG-2004, sequence versi
07-FEB-2006, entry version
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Attribution-NoDerivs License
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Buell C., Yuan Q., Ouyang S., Liu J., Wang A., Maiti k., Lin.

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Reardon M., Weaver B., Johri S., Lewis M., Utterback T., Van /

Wortman J., Haas B., Koo H., Zismann V., Hsiao J., Iobst S.,

de Vazeilles A., White O., Salzberg S., Fraser C.;

Charitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.
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07-FEB-2006,
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24-MAY-2005, sequence version 1.
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Dukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
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   Copyrighted by the UniProt Consortium, see http://www.uniprot.org/tubstributed under the Creative Commons Attribution-NoDerivs License
   Buell C.R., Wing R.A., McCombie W.A., Ouyang S.; Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.
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GO; GO:0003779; F:actin binding; IDA.
   Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms Distributed under the Creative Commons Attribution-NoDerivs License
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17-MAR-2006, entry version 30.

CDK5 regulatory subunit-associated protein 3 (CDK5 activator-binding protein C53) (HSF-27 protein).

Protein C53) (HSF-27 protein).

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Biochem. Biophye
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El-Sayed N.M.A., Myler P.J., Blandin G., Berriman M., Cradul El-Sayed N.M.A., Hertz-Fowle Aggarwal G., Caler E., Renauld H., Worthey E.A., Hertz-Fowle Aggarwal G., Peacock C., Bartholomeu D.C., Haas B.J., Tran A.-Ghedin E., Peacock C., Bartholomeu D.C., Haas B.J., Tran A.-Wortman J.R., Alsmark U.C.M., Angiuoli S., Anupama A., Badge Wortman J.R., Alsmark U.C.M., Angiuoli S., Anupama A., Badge
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Submitted (JUN-2005) to the EMBL/GenBank/DDBJ databases
-i- CAUTION: The sequence shown here is derived from an
EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry v
  Wortman J.R., Alsmark U.C.M., Angiuoli S., Anupama A., Badger J., Bringaud F., Cadag E., Carlton J.M., Cerqueira G.C., Creasy T., Delcher A.L., Djikeng A., Embley T.M., Hauser C., Ivens A.C., Kummerfeld S.K., Pereira-Leal J.B., Nilsson D., Peterson J., Salzberg S.L., Shallom J., Silva J.C., Sundaram J., Westenberger S Salzberg S.L., Shallom J., Silva J.C., Andersson B., Stuart K.D., White O., Melville S.E., Donelson J.E., Andersson B., Stuart K.D.,
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  Distributed under the Creative Commons Attribution-NoDerivs License
  Fraser C.M., Stuart K.D., Andersson B.;
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  NUCLEOTIDE SEQUENCE [MRNA] (ISOFORM
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   Science 0:0-0(2005).
  Hall N.;
   Science 0:0-0(2005).
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RA Ota T., Suzuki Y., Mishikawa T., Otsuki T., Sugiyama T., Irie R., RA Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Makita H., RA Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S., RA Yamamoto J., Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K., RA Yamamoto J., Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K., RA Murakami K., Yasuda T., Iwayanagi T., Wagatsuma M., Shiratori A., RA Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M., Sato K., Karisuta N., Sato K., Tanikawa M., Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K., Fujimori K., RA Abe K., Kamihara K., Katsuta N., Sato K., Tanikawa M., Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K., Fujimori K., Takahashi-Fujii A., Hara H., Tanase T.-O., Nomura Y., RA Ono Y., Takiguchi S., Watanabe S., Yosida M., Hotuta T., Kusano J., Ra Alishigaki H., Watanabe M., Sasaki N., Aotsuka S., Yosida M., Hotuka S., Yosida M., Hara H., Tanase T.-O., Nomura Y., RA Yoshikawa Y., Watsunawa H., Ichhara T., Shiohata N., Sano S., Kawakami S., Funikawa Y., Watsunawa H., Ichhara T., Shiohata N., Sano S., Na Yoshikawa Y., Matsunawa H., Ichhara T., Shiohata N., Sano S., RA Nakagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H., RA Yamazaki M., Watanabe T., Sugiyama A., Takamoto M., Kawakami B., Yamazaki M., Watanabe T., Sugiyama A., Takamoto M., Kawakami B., Yamazaki M., Watanabe T., Sugiyama A., Takamoto M., Kawakami B., Yamazaki M., Watanabe T., Watuna A., Takamoto M., Kawakami B., Yamazaki M., Watanabe T., Watuna T., Shigata K., Sasaki M., Aotsuka S., Puliwara T., Yamada A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S., RA Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S., RA Mizushima S., Watana M., Hata H., Watanabe M., Komatsu T., Nakagawa K., RA Nakai K., Yada T., Nakamura Y., Shirai Y., Takahashi Y., Nakagawa K., RA Nakai K., Nasaho Y., Makagawa K., Nakai M., Nasuho Y., Yamashita R., Kawakami T., Nasuho Y., Yamashita R., Kawakami T., Nasuho Y.,
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schu Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bha Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsie Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Sc
   TISSUE-Placenta;
PubMed=14702039; DOI=10.1038/ng1285;
Pha T. Suzuki Y., Nishikawa T., Ore
  MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.
   Shichijo S., Itoh K.; "Identification of immuno-peptidmics that are recognized "Identification of immuno-peptidmics that are recognized reactive CTL generated from TIL of colon cancer patients. Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
   Favier A.-L., Harsi C., Chrobozcek J.; "Protein interacting with the receptor binding domain of adenovirus serotype 41 fiber protein."; submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.
  TISSUE=Colon
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  TISSUE=Kidney;
  Хіе Ү.Н., Не Х.Н.,
  "Cloning and characterization
  protein.
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. Toyoda A., Takeda T., Sakaki Y., Tanaka A., 1
(APR-2005) to the EMBL/GenBank/DDBJ databases
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  SEQUENCE
  SEQUENCE
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  36:40-45 (2004).
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  MRNA] (ISOFORM
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  novel CDK5 activator
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Bhat N.K.,
Hsieh F.,
  ō,
  TISSUE
  Yokoyama
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Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Schnerch A., Schein J.E., Jones S.J.M., Marra M.A., "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences."
   GG; GO:0042808; F:neuronal Cdc2-like kinase binding; NAS. GG; GO:0007420; P:brain development; NAS. GO; GO:0008283; P:cell proliferation; ISS. GO; GO:0008283; P:regulation of cyclin dependent protein GG; GO:0045664; P:regulation of neuron differentiation; N InterPro; IPR008491; DUF773.
InterPro; IPR013324; Sigma r3 r4.
PANTHER; PTHR14894; DUF773; 1.
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MIM; 608202; gene.
LinkHub; Q96JB5;
  MEDLINE=20184747; PubMed=10721722; DOI Ching Y.-P., Qi Z., Wang J.H.; Chind York enovel neuronal Cdk5 "Cloning of three novel neuronal Cdk5 Gene 242:285-294(2000)
                       Pfam; PF05600; DUF773; 1.
Alternative splicing; Phosphorylation.
CHAIN 1 506 CDK5 regu
   Distributed
   Copyrighted
  TISSUE
  Proc.
   Brownstein
   PTM: Phosphorylated in vitro by CDK5 (By si
SIMILARITY: Belongs to the CDK5RAP3 family
CAUTION: Ref.3 sequence differs from that
  TISSUE SPECIFICITY: Ubiquitous. Expressed in he placenta, lung, liver, skeletal muscle, kidney
  SUBUNIT: Interacts with CDK5R1. This interacthe association between CDK5R1 and CDK5RAP3
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   placenta, lun
Isoform 3 is
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AK223387;
BC009957;
BC072435;
   AF110322;
AF217982;
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AB062433;
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   INCLE-VICE TO THE NOTICE TO TH
   Note=Due to an intron
  IsoId=Q96JB5-1; Sequence=Displayed;
  IsoId=Q96JB5-2; Sequence=VSP
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   by the UniProt Consortium, see http://www.uniprot.org/terms under the Creative Commons Attribution-NoDerivs License
  Acad. Sci. U.S.A.
   AAG39277.1; -; mRNA.
AAG17225.1; -; mRNA.
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BAB397107.1; -; mRNA.
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protein
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  99:16899-16903 (2002)
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  _007566, VSP_007567
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  interaction
DK5RAP3 (By s
  Abramson R.D., Mullahy
   serotype
                       subunit-associated
  similarity)
   skeletal muscle
   in heart, brain,
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21-JUN-2005, integrated into U
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07-FEB-2006, entry version 8.
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C -> E (in Ref. 6)

Q -> E (20 Ref. 6)

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  19;
  ۲,
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  71
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RESULT 13
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AC Q6IGC8;
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  breese K., Boll M., Alt-Moerbe J., Schaegger H., Fuchs "Genes coding for the benzoyl-CoA pathway of anaerobic metabolism in the bacterium Thauera aromatica."; Eur. J. Biochem. 256:148-154(1998).
   SEQUENCE
   Thauera aromatica.";
Eur. J. Biochem. 255:618-627(1998).
-!- FUNCTION: Catalyzes the hydrati
  Copyrighted by the UniProt Consortium, see http://www.uniprot.org/termsDistributed under the Creative Commons Attribution-NoDerivs License
  MEDLINE=98409281; PubMed=9738901;
Laempe D., Eisenreich W., Bacher A.,
"Cyclohexa-1,5-diene-1-carbonyl-COA,
anaerobic metabolism of benzoyl-COA
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-!- PATHWAY: Aromatic compounds metabolism via benzoyl-CoA.
   carboxyl-CoA.
-!- CATALYTIC ACTIVITY: Cyclohexa-1,5-dienecarbonyl-CoA + H(2)0
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Pfam; PF00378; ECH; 1.
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(Dienoyl-CoA hydratase).
   Fuchs G.;
                          130
   257
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12;
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cyclohexa-1,5-diene-1-

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bacterium involved

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1; 30;

Length CRC64;

Indels

14;

Gaps

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sequencing;

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Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R.,
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Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Ishii S.,
Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S.,
Yamamoto J., Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K.,
Yamamoto J., Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K.,
Yamamoto J., Saito K., Kawai Y., Isono Y., Wagatsuma M., Shiratori A.,
Yamamoto J., Saito K., Yaodaira H., Kondo H., Sugawara M.,
Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M.,
Takahashi M., Kanda K., Yokoi T., Furuya T., Kikkawa E., Omura Y.,
Takahashi M., Kanda K., Yokoi T., Sato K., Tanikawa M., Yamazaki M.,
   KREM2 HUMAN STANDARD; PRT; 462 AA. Q8NCW0; Q8NCW1; Q96GLB; Q98FB9; Q98C903, integrated into UniProtKB/Swiss-Prot. 01-CCT-2002, sequence version 1. 07-FEB-2006, entry version 27. Kremen protein 2 precursor (Kringle-containing pro and the nose) (Dickkopf receptor 2). Name-KREMEN2; Synonyms=KRM2;
   NUCLEOTIDE SEQUENCE.
PubMed=14709175; DOI=10.1186/gb-2003-5-1-r3;
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Ephydroidea; Drosophilidae; Drosophila.
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   Submitted
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"Human
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   12
  72
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Kremen2 and Wnt signaling.";
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sel J.D.,
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Noriya S., Nomiyama H., Satoh N., Takami S., Terashima Y., Suzuki O., Al Nakagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H., Al Hishigaki H., Watanabe T., Sugiyama A., Takemoto M., Kawakami B., Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y., Pujimori Y., Koniyama M., Tashiro H., Tanigami A., Fujiwara T., Fujimori Y., Koniyama M., Tashiro H., Tanigami A., Fujiwara T., A., Fujimori Y., Koniyama M., Tashiro H., Tanigami A., Fujiwara T., Yamada K., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S., Okitani R., Kawakami T., Noguchi S., Itoh T., Shigeta K., Senba T., Okitani R., Kawakami T., Noguchi S., Itoh T., Shigeta K., Senba T., A., A., Kamatsumura K., Nakajima Y., Mizuno T., Morinaga M., Sasaki M., A., A., Matsumura K., Nakajima Y., Mizuno T., Morinaga M., Sasaki M., Togashi T., Oyama M., Hata H., Watanabe M., Komatsu T., Nakagawa K., A., Mizushima-Sugano J., Satoh T., Shirai Y., Takahashi Y., Nakagawa K., A., Nakai K., Yada T., Nomura N., Kikuchi H., Masuho Y., Yamashita R., Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sugano S.;

"Complete sequencing and characterization of 21,243 full-length human
   WEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

A Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

A Hischni S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

A Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

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A Richards S., Worley K.C., Hale S., Garcia A.M., Gy L.J., Hulyk S.W.,

A Richards S., Worley K.C., Hale S., Garcia A.M., Sanchez A.,

Willalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

A Pahly J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Baltock S., S
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-!- SIMILARITY:
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   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield V.S.N., Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length
  Copyrighted
Distributed
  and mouse cDNA sequences.";

Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).

Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).

TO block Wnt/beta-catenin signaling. Forms a ternary com to block Wnt/beta-catenin signaling. Forms a ternary com Dkkl and LRP6 and induces rapid endocytosis and removal Dkkl and LRP6 from the plasma membrane (By similarity).

Teceptor LRP6 from the plasma membrane (By similarity).
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Contains 1 kringle domain
Contains 1 WSC domain.
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Attribution-NoDerivs License
  (ISOFORMS
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   VSP_050514
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  AND
   Fujimori K.,
  4
  Nomura Y.,
   with Dickkopf
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  <u>.</u>
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  Wint
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Matches
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SEQUENCE
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DISULFID
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388
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By similarity.
By similarity.
By similarity.
By similarity.
By similarity.
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I (GlcNAc...
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(Potential).
(Potential).
(Potential).
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  Gaps
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AC QARTS7_AC
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RA NICALAN C., SA

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RA Kellis M., Volff J.-N., Suigo R., Zody M.C., McSinson-Rechavi M.,
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RA Laudet V., Schachter V., Quetier F., Saurin W., Scarpelli C.,
Wincker P., Lander E.S., Weissenbach J., Roest Crollius H.;
"Genome duplication in the teleost fish Tetraodon nigroviridis reveals
RT The early vertebrate proto-karyotype.";
Nature 431:946-957(2004).
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GO; GO:00042626; F:AITPase activity, coupled to t
GO; GO:0004662; F:nucleotide binding; IEA.
GO; GO:0006810; P:transport; IEA.
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SMART; SM00382; AAA; 1.
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Genoscope; Whitehead Institute Centre for Genome Research;
Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
-!- CAUTION: The sequence shown here is derived from an
EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which
  Tetraodon nigroviridis (Green puffer).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetradontoidea; Tetraodontidae; Tetraodon.
   07-FEB-2006, entry version 5.
Chromosome 2 SCAF14997, whole genome
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ATP-binding; Nucleotide-binding.
   Copyrighted by the UniProt Consortium, see http://www.uniprot.org/t.Distributed under the Creative Commons Attribution-NoDerivs License
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SIMILARITY: Belongs to the ABC transporter family.
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652 )
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   (Fragment).
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  .org/terms
   IEA
      N
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| Database :                                       | Post-processi                                                                   | Minimum DB see<br>Maximum DB see                              | Total number                                              | Searched:                      | Scoring table:                        | Title:<br>Perfect score:<br>Sequence:                                     | Run on:                                                                                                    | OM protein - ]                              |                                                                        |
|--------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------|--------------------------------|---------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------------------------------------------------------------|
| PIR 80:* 1: pir1:* 2: pir2:* 3: pir3:* 4: pir4:* | Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries | Minimum DB seq length: 0<br>Maximum DB seq length: 2000000000 | Total number of hits satisfying chosen parameters: 283416 | 283416 segs, 96216763 residues | : BLOSUM62<br>Gapop 10.0 , Gapext 0.5 | US-10-063-534-30<br>: 386<br>I MLLLTLLLLLLLKGSCLEWPAMTCSQAQPRGEGEKVGDG 73 | June 6, 2006, 21:33:55; Search time 39 Seconds<br>(without alignments)<br>180.098 Million cell updates/sec | OM protein - protein search, using sw model | GenCore version 5.1.9<br>Copyright (c) 1993 - 2006 Biocceleration Ltd. |

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

| 29                 | 28                 | 27                 | 26                 | 25                 | 24                 | 23                 | 22     | 21     | 20     | 19     | 18                 | 17     | 16     | 15     | 14                 | 13                 | 12                 | 11     | 10                 | 9                  | 8                  | 7                  | 0      | ហ      | 4                  | ω                  | N                  | 4                  |           | Result |
|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------|--------|--------|--------|--------------------|--------|--------|--------|--------------------|--------------------|--------------------|--------|--------------------|--------------------|--------------------|--------------------|--------|--------|--------------------|--------------------|--------------------|--------------------|-----------|--------|
| 60.5               | 60.5               | .0                 | 0                  | 60.5               |                    |                    | 0      | 0      | 0      | 61     | •                  | •      | •      | 61.5   | 61.5               |                    | 62                 | 62     | 62.5               |                    | 63                 | 63                 | w      | 63.5   | ũ                  | 65.5               | 7.                 | 0                  | Score     |        |
| 15.7               | 15.7               | •                  | 15.7               | 15.7               |                    | 15.7               |        | 15.7   | 15.7   | 15.8   |                    | •      | 15.9   | 15.9   | 15.9               | 6                  | 16.1               | •      | რ.                 | 16.2               | 16.3               | 9                  | 6      | 16.5   | 16.5               | 17.0               | 17.5               | 18.3               | Match :   | Query  |
| 365                | 365                | 365                | 365                | 365                | 357                | 275                | 274    | 273    | 273    | 784    | 365                | 326    | 326    | 148    | 148                | 1240               | 496                | 141    | 283                | 270                | 141                | 141                | 282    | 278    | 277                | 3788               | 669                | 419                | Length [  |        |
| N                  | N                  | N                  | N                  | _                  | N                  | <b>J-4</b>         | ۲      | _      | ۲      | N      | N                  | N      | N      | N      | N                  | ۲                  | ר                  | N      | N                  | Ŋ                  | N                  | Н                  | N      |        |                    |                    |                    |                    | DB        |        |
| I38441             | 161902             | A45847             | I38443             | HLHUA2             | S18198             | HLHU10             | HLHU32 | HLHU69 | HLHUAW | JQ0317 | JH0534             | H98186 | AB3100 | G98279 | AB3004             | DJBE21             | 04B0C2             | A23571 | B83618             | S56160             | A25477             | HARNW              | 850031 | T46458 | I52825             | T13960             | A49585             | JC7863             |           |        |
| gene HLA-A-6802 pr | MHC class I histoc | MHC class I histoc | gene HLA-A-0203 pr | MHC class I histoc | class I histocompa | MHC class I histoc | н      | н      | nisto  | cal    | class I histocompa |        |        |        | hypothetical prote | DNA-directed DNA p | steroid 21-monooxy | in al  | probable CoA trans | mast cell tryptase | hemoglobin alpha c | hemoglobin alpha c |        | hetica | gene MAC25 protein | beige protein homo | Na+ channel protei | IC53 protein - hum | scription |        |

## ALIGNMENTS

| RESULT: A49585 Na+ chai C; Spate: C; Date: C; Access R; Voill: Proc. N: Proc. N: A; Title A; Referr A; Access A; Resid A; Cross R; McDona Am. J. A; Title                                                                                                                                                                                                                                                                                                                                                                                                        | Db Qy | Query M<br>Best Lo<br>Matches | RESULT 1 JC7863 IC53 protein C;Species: H C;Date: 09-D C;Accession: R;Chen, J:, Biochem. Bio A;Title: A Bio A;Reference: A;Accession: A;Molecule A;Residues: A;Comment: A;Comment: C;Gene:ic5: A;Gene:ic5: A;Gene:ic5: A;Gene:ic5: A;Map positi: C;Keywords: |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RESULT 2 A49585 A49586 Na+ channel protein, amiloride-sensitive - human C;Species: Homo sapiens (man) C;Becies: Homo sapiens (man) C;Bate: 16-Feb-1996 #sequence revision 16-Feb-1996 #text_change 09-Jul-2004 C;Accession: A49585; I51911 C;Caccession: A49585; I51911 Proc. Natl. Acad. Sci. U.S.A. 91, 247-251, 1994 A;Title: The lung amiloride-sensitive Na+ channel: biophysical properties, A;Reference number: A49585; MUID:94105144; PMID:8278374 A;Recession: A49585 A;Status: preliminary A;Accession: A49585 A;Status: preliminary A;Residues: 1-669 |       |                               |                                                                                                                                                                                                                                                              |

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C;Accession: T13960
R;Mori, M.; Nishikawa, T.; Hi
submitted to the EMBL Data Li
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R;Murphy, M.; Pykett, M.J.; Harnish, P.; Zang, K.D.; George, D.L.
Cell Growth Differ. 4, 715-722, 1993
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  A; Map position: 12p13
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   Higuchi, K.; Nishimura, M.
Library, November 1998
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9; Mismatches
   9
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   Indels
   due
   EMBL: AB020019; NID: d1241953;
   669;
   ç
   13;
  09-Jul-2004
  fibronectin type I
  recombination between
     inhibitor homology
   Gaps
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   A;Status: preliminary
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  A; Molecule type: mRNA
A; Residues: 1-282 < YAM>
  A; Status: preliminary
  Query
Best L
   Query Match
Best Local Similarity
Matches 27; Conserv
   Matches
   Matches
  Query Match
Best Local
  Local
  ьосаі
  Match
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A;Note: DKFZp434M102.1
   Biochem. J. 303, 591-598, 1994
A;Title: Purification and molecular cloning of prostacyclin-stimulating A;Reference number: S50031; MUID:95071263; PMID:7980422
A;Accession: S50031
  prostacyclin-stimulating factor - C;Species: Homo gariana (----
  R;Ansorge, W.; Wirkner, U.; Mewes, H.W.; Gassenhuber, J.
submitted to the Protein Sequence Database, January 2000
A;Reference number: Z23028
A;Accession: T46458
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  2 LLLTLLLLLL-------KGSCLEWGLV------
  6 LILLLLIKGSCLEWGLVGAQKVSSATDAPIRDWAFFP-PSFLCLLPH-RPAMTCSQAQP
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   Conservative
  Conservative
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  Length 277;
   Length 282;
  Indels
   Indels
   Indels
  278;
  s:
   13;
   35,
  -GAQKVSSA 31
  Nawata, H
   Gaps
  Gaps
   Gaps
   NID: 9861520; PIDN: 1
   factor
  64
   ಽ
   4
   from serum
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mast cell tryptase precursor - Mongolian jird)
(;Species: Meriones unguiculatus (Mongolian jird)
C;Date: 27-Oct.1995 #sequence_revision 03-Nov-1995 #text_change 09-Jul-2004
C;Accession: S56160
R;Murakumo, Y.; Ide, H.; Itoh, H.; Tomita, M.; Kobayashi, T.; Maruyama, H.; Horii, Y.;
Biochem. J. 309, 921-926, 1995
A;Title: Cloning of the cDNA encoding mast cell tryptase of Mongolian gerbil, Meriones
A;Reference number: S56160; MUID:95366971; PMID:7639711
A;Accession: S56160
  Biol. Chem. Hoppe-Seyler 367, 147-152, 1986
A, Title: Primary structure of adult hemoglobin of white-throated capuchin, Cc A; Reference number: A90702; MUID:86187258; PMID:3964444
A, Accession: A25477
A, Accession: A25477
A, Residues: 1-141 <TAN-
A, Residues: 1-141 <TAN-
A, Cross-references: UNIPROT:P07421; UNIPARC:UPI000012C15C
C; Superfamily: globin; globin homology
C; Superfamily: globin; globin homology
F; 2-141/Domain: globin homology <GLB-
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F; 87/Binding site: heme iron (His) (proximal axial ligand) #status predicted
   A;Residues: 1-141 CMAZSA;Cross-references: UNIPROT:P01963; UNIPARC:UPI000012C15E
A;Cross-references: UNIPROT:P01963; UNIPARC:UPI000012C15E
C;Superfamily: globin; globin homology
C;Keywords: blood; chromoprotein; erythrocyte; heme; iron; metalloprotein; oxygen
E;2-141/Domain: globin homology <GLB>
   Hoppe-Seyler's Z. Physiol. Chem. 363, 1077-1085, 1982
A;Title: Die Primaerstruktur des Haemoglobins vom Breitmaulnashorn (Ceratotherium simum, A;Reference number: A91701; MUID:83055102; PMID:7141412
A;Accession: A02286
A;Molecule type: protein
   C;Accession: A02286
R;Mazur, G.; Braunitzer, G.; Wright, P.G.
   856160
  닭
  Ś
   밁
  S
  hemoglobin alpha chain - white rhinoceros
C;Species: Ceratotherium simum (white rhinoceros, square-lipped rhinoceros)
C;Date: 17-Dec-1982 #sequence_revision 17-Dec-1982 #text_change 12-Jul-2004
   밁
  RESULT
   RESULT
  HARNW
  87/Binding site: heme iron (His) (proximal axial ligand) #status
   :2-141/Domain: globin homology <GLB>
:58/Binding site: oxygen (His) (distal axial ligand) #status predicted
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  Query Match
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   65
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  19;
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   Similarity
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   WGHVGAQAGEYGAEALERMFLSFPTT-KTYFPHFD-LSHGSAQVKAHGKKVGD
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   Conservative
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   74
  16.3%;
   Score 63; DB 1; Length 141; Pred. No. 4.6; 7; Mismatches 25; Indels
  Score 63; DB 2; Length 141; Pred. No. 4.6; Mismatches 26; Indels
   capuchin)
12-Jul-2004
  predicted
   64
   64
  72
  Gaps
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   Cebus capucin
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A;Cross-references: UNIPROT:P07419; UNIPARC:UPI000012C171; GB:M14567; A;Note: initiator Met not shown C;Superfamily: globin; globin homology
  R; Wainwright, B.; Hope, R.

Proc. Natl. Acad. Sci. U.S.A. 82, 8105-8108, 1985
A; Title: Cloning and chromosomal location of the alpha-
A; Reference number: A94077; MUID:86068050; PMID:3865220
A; Accession: A23571
   R;Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; adman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.; Lory, S.; Olson, M.V.; Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
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A;Residues: 1-270 <MUR>
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F;26-262/Domain: trypsin homology <TRY>
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A;Cross-references: UNIPROT:Q9I6R2;
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  A;Title: Complete genome sequence of Pseudomonas aeruginosa A;Reference number: A82950; MUID:20437337; PMID:10984043 A;Accession: B83618
   C; Keywords: blood; chromoprotein; heme; iron; metalloprotein; oxygen carrier
  C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 09-Jul-2004
C;Accession: B83618
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   A;Status: preliminary
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;87/Binding site: heme iron (His) (proximal axial ligand)
                      Query Match
Best Local
   Genetics:
  Matches
   Matches
   Query Match
  Matches
  Query Match
  1899
   Local
  Local
   PA0226
  14
   16;
l Similarity
18; Conserv
  l Similarity
17; Conserv
   1 MLLLTLLLLLLKGS-CLEWGLVGAQKVSSATDAPIRDW
  Similarity
  KGNVLLWGILGVQKEAALAAKRCIVTVEEIVDELDAPMNACVLPSWAL---SAVCLVP 225
  KGSCLEWGLVGAQK-----
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  Conservative
   Conservative
   Conservative
                 16.1%;
34.0%;
   16.2%;
  40.0%;
  16.2%;
   (distal axial ligand) #status predicted
  8;
   <u>ت</u>
                      Score 62; D
Pred. No. 6;
   Score 62.5;
Pred. No. 1
  Score 62.5;
Pred. No. 9
  UNIPARC: UPI00000C4FA9; GB:AE004460; GB:AE004091;
  Mismatches
   Mismatches
   Mismatches
  -----VSSATDAPIR-----DWAFFPPSFLCLLP 51
   10;
  DB 2;
  .
6.
   DB 2;
  DВ
   12;
  25;
  11;
  2;
   Length 283;
  Length 270;
   39
  Indels
   Indels
  Indels
   and
  K.R.;
  Warrener, P.; Hickey,
K.R.; Kas, A.; Larbig,
   #status
   beta-globin genes from a mare
   PA01, an
  2
   7;
  predicted
  Gaps
   opportunistic pathog
   Gaps
  Gaps
  NID:g163892;
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  (strain
  M.J.; Br
K.; Lim,
  PIDN:
  NID
   PIDI
  g
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WGLVGAQKVSSATDAPIRDWAFFPPSFLCLLPHRPAMTCSQAQPRGEGEKVGD

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R;White, P.C.; New, M.I.; Dupont, B.
Proc. Natl. Acad. Sci. U.S.A. 81, 1986-1990, 1984
A;Title: Cloning and expression of cDNA encoding a bovine adrenal cytochrome A;Reference number: A21181; MUID:84193940; PMID:6609358
A;Contents: annotation; sequence report
A;Note: this sequence differs substantially from that in reference A24101
   A;Reference number: A24101; MUID:86243279; PMID:2424492
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B;Cross-references: UNLPARC:UPI000016C2F3; GB:K01333; NID:g162944; PIDN:AAA30486.1;
B;Ochem. 94, 1711-1714, 1983
   C;Date: 28-May-1986 #sequence revision 05-Apr-1995 #text_change 09-Jul-2004 C;Accession: A27555; A00192; A24101; C28860; A21181 R;Chung, B.; Matteson, K.J.; Miller, W.L. Proc. Natl. Acad. Sci. U.S.A. 83, 4243-4247, 1986 A;Title: Structure of a bovine gene for P-450c21 (steroid 21-hydroxylase) defines a A;Reference number: A27555; MUID:86233409; PMID:3487086 A;Accession: A27555
                             RESULT
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R;John, M.E.; Okamura, T.; Dee, A.; Adler, B.; John, M.C.; White, P.C.; Simpson, E.R.; Webichemistry 25, 2846-2853, 1986
A;Title: Bovine steroid 21-hydroxylase: regulation of biosynthesis.
   A;Molecule type: protein
A;Residues: 1-12, 'K', 14-15,248-250, 'S' <OGS:
A;Cross-references: UNIPARC:UPI0000171D8D
   R;YOshioka, H.; Morohashi, K.; Sogawa, K.; Yamane, M.; I
J. Biol. Chem. 261, 4106-4109, 1986
A;Ticle: Scructural analysis of cloned cDNA for mRNA of
A;Reference number: A00192; MUID:86140226; PMID:3005319
   밁
   S
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  A; Title: Partial amino acid sequences of two mitochondrial A; Reference number: A91972; MUID:84087829; PMID:6654880
  A;Cross-references: UNIPROT:P00191; UNIPARC:UPI00001282E6; GB:M11267; NID:g163468; R;Yoshioka, H.; Morohashi, K.; Sogawa, K.; Yamane, M.; Kominami, S.; Takemori, S.;
  steroid 21-monooxygenase (EC 1.14.99.10) cytochrome P450 21A1 - bovine N;Alternate names: cytochrome P450 (C21); steroid 21-hydroxylase
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  DNA-directed
  A; Experimental source: adrenal cortex microsomes
   A; Accession: C28860
  A; Accession: A00192
  A; Residues: 1-496 < CHU>
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   52
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  14
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  WGKVGGHAGAYAAEALARTFLSFPTT-KTYFPHFD-LSPGSAQIQGHGKKVAD
polymerase
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   57
   16.1%;
  (E)
  2.7.7.
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     .
7
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herpesvirus
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  microsomal cytochrome
   reticulum; heme;
   and
N
   two
     (strain
   microsomal
  64
     186)
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   iron;
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Okada
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   A;Gene
A;Map
  C;Superfamin
  Science 294, 2323-2328, 2001
A;Title: Genome Sequence of the Plant Pathogen and Biotechnology Agent Agrobacterium
A;Reference number: A97359; MUID:21608551; PMID:11743194
   R;Goodner, B.; Hinkle, G.; Gattung, S.; Miller, N.; Blanchard, M.; Qurollo, A.; Liu, F.; Wollam, C.; Allinger, M.; Doughty, D.; Scott, C.; Lappas, C.;
   B
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  C;Date: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change 09-Jul-2004
  밁
   S
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   á
   R;Tsurumi,
                             A; Accession: G98279
   hypothetical protein AGR_L_2383 [imported] - C;Species: Agrobacterium tumefaciens
  G98279
   RESULT
   RESULT
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   15
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F.; Wollam,

Agrobacterium tumefaciens (strain

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C;Date: 11-va...
C;Accession: AB3004
C;Accession: AB3004
R;Wood, D.W.; Setubal, J.C.; Kaul, R.; Monxs, R;Wood, G.W.; Grant, C.; Guenthner, erage, G.; Gillet, W.; Grant, C.; Guenthner, F.; Zhang, S.
Science 294, 2317-2323, 2001
Science 294, 2317-2323, 2001
Science 294, 2317-2323, 2001
  Gene 52, 129-137, 1987
A;Title: Nucleotide sequence of the DNA polymerase gene of herpes simplex virus type
A;Reference number: A27315; MUID:87277385; PMID:3038677
A;Accession: A27315
  A;Residues: 1-1240 <TSU>
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A;Experimental source: strain C58 (Dupont)
   A; Molecule type: DNA
   A;Title: The Genome of the Natural Genetic Engineer Agrobacterium tumefaciens A;Reference number: AB2577; MUID:21608550; PMID:11743193
  hypothetical protein Atu3636 [imported] - Agrobacterium tumefaciens (strain C;Species: Agrobacterium tumefaciens C;Species: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 09-Jul-2004
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   PKRPAV----
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4; Mismatches
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   2;
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   Length 148;
   Indels
   ۲
   T.; Levy, R.; Li,
   Σ.
   Perry, M.; Gordon-Kamm,
   21;
  6
   Gaps
  Gaps
  55
   56
   C58,
  Υ.,
   McClella
   Dupont)
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